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PUBLIC UTILITIES COMMISSION  
Annual Report FY 1992-93  
City and County of San Francisco

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PUBLIC UTILITIES COMMISSION  
City and County of San Francisco

Annual Report

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## THE PUBLIC UTILITIES COMMISSION

The Public Utilities Commission is an agency of the City and County of San Francisco. In 1932, the San Francisco Charter created a Public Utilities Commission to take over the operations and management of the then present and any future public utilities. The utilities currently within the Commission's jurisdiction include the San Francisco Water Department, the Hetch Hetchy Project and the San Francisco Municipal Railway. Each of these utilities operates separately and maintains separate enterprise funds.

Under the provisions of the Charter, responsibility for maintenance, operation and development of these utilities has been vested in the five-member Commission. Commission members are appointed by the Mayor to four-year terms. As provided in subsection 3.591 of the Charter:

"The Public Utilities Commission shall have charge of the construction, management, supervision, maintenance, extension, operation and control of all public utilities and other properties used, owned, acquired, leased or constructed by the City and County, excepting airports, for the purpose of supplying any public utility service to the City and County and its inhabitants, to territory outside the limits of the City and County, and to the inhabitants thereof."



City and County of San Francisco

P U B L I C   U T I L I T I E S   C O M M I S S I O N

287 City Hall  
San Francisco, CA 94102  
(415) 554-7311

October 12, 1994

The Honorable Public Utilities Commission  
City and County of San Francisco  
287 City Hall  
San Francisco, California 94102

Dear Members,

In accordance with City Charter Sections 3.500 and 3.501  
this annual report for Fiscal Year 1992-93 is hereby  
submitted.

Each of the PUC departments have summarized their principal  
activities of 1992/93 in the following pages. In this memo  
I would like to share some personal observations. I started  
with the PUC Finance Bureau in 1980 and was named Acting  
General Manager of the PUC in March, 1993. My observations  
derive from that experience. While the report covers the  
1992/93 fiscal year, this memo is written in October of 1994  
and reflects the passage of time.

1992/93 In Review:

The first order of business after my appointment as Acting  
General Manager was to normalize relationships between the  
Board of Supervisors, the Mayor, the Commission, its  
departments and their staff. In large measure this has been  
accomplished.

The end of the drought brought immediate relief to the most  
pressing problems facing Hetch Hetchy and the Water  
Department.

MUNI's most immediate problems were budgetary. In the  
spring of 1993 MUNI had just gone through a second round of  
budget cuts for that fiscal year and still projected a



shortfall. This was resolved by a combination of a hiring freeze, expenditure restrictions, expenditure deferrals and mandatory furloughs. While successful from a financial stand point, these measures caused operational problems evidenced by high levels of missed service during the summer of 1993. Less obvious consequences of these measures continue to hamper MUNI's performance.

Having thus survived to the end of the fiscal year, it was possible to make a preliminary assessment of each department. While the assessments and resulting programs are on-going, they drive much of our current work and are worthy of mention here.

The first conclusion was that the transportation and water/power functions are very different and that there was little if any operational or policy benefit from their being combined under a single commission. To the contrary, it has been my observation that the mix results in a blurring of policy and management vision that serves neither function well. These issues were dealt with in the drafting of Proposition M which was placed on the November, 1993 ballot and ultimately passed by the people of San Francisco. This resulted in the transportation functions being removed from the PUC on June 28, 1994 and placed under the jurisdiction of a newly formed Transportation Commission. The PUC retained responsibility for Hetch Hetchy and the Water Department.

#### Observations about Water and Hetch Hetchy:

Water and Hetchy are organizationally sound but face a series of important challenges. The water rights of senior rights holders such as ourselves are being challenged by environmental demands for additional allocations of water to in-stream purposes. This pressure is aggravated by an on-going dispute with the Modesto and Turlock Irrigation Districts about the City's responsibility for in-stream releases which may be required from New Don Pedro dam. Together these may adversely affect our ability to reliably meet our supply obligations.

Much of our water supply and distribution system is old and in need of major maintenance or replacement. Several critical facilities are in need of seismic strengthening. Changes in water quality legislation and regulation will require the construction of additional water treatment facilities in the near future.

The necessary response to these challenges will be to limit or reduce water consumption at the same time that new supplies are being obtained and new and upgraded facilities are being financed. Increased costs covered by reduced



shortfall. This was resolved by a combination of a hiring freeze, expenditure restrictions, expenditure deferrals and mandatory furloughs. While successful from a financial stand point, these measures caused operational problems evidenced by high levels of missed service during the summer of 1993. Less obvious consequences of these measures continue to hamper MUNI's performance.

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consumption can only result in increased water rates.

At the same time, several aspects of our relationship to our suburban customers need to be revisited. Whether we should be responsible for meeting projected growth in the suburbs' demand, for providing them with potable water, for permanent supply to the cities of North San Jose and Santa Clara and how these responsibilities will be financed are questions that are not resolved in the current agreements with our suburban customers. All of the pressures mentioned in the preceding paragraphs make these questions timely.

(Parting) Observations about MUNI:

External expectations for MUNI are confronted in budgetary terms. General fund support has been reduced in favor of other municipal services. Fare increases and service reductions are unacceptable. The result is that we were unable to fund 100% of currently scheduled service. We are committed by voter mandate and PUC policy to pursue service expansion in the Geary, Embarcadero and Bayview service corridors. This will place additional strain on operating resources. The number of vehicles available for servicing (spare ratio) has been reduced by FTA mandate while the procedural requirements for procuring repair parts and services have been increased to meet various City policy objectives. These increased demands are being handled by a staff that has been reduced by 25% in administrative sections and 10% overall.

For all of that, there are lots of people in MUNI who work hard, who are dedicated to public transportation, who desperately want things to improve, and who have good ideas and lots of energy. In fact, MUNI is better managed today than it was a decade ago. It is easiest to see in terms of attitudes, systems and procedures. It is hardest to see in terms of on-street performance. It is largely because of the persistent efforts of MUNI's people.

Proposition M places MUNI and the political process in greater alignment. MUNI's top four Deputies will be appointed by a General Manager who is appointed by a Transportation Commission which is appointed by the Mayor. All of these appointments are "at pleasure." That arrangement gives the Mayor the power to push MUNI for performance. It gives MUNI management and the Transportation Commission the necessity to push back in order to get the resources that they need. It gives nobody in that list a place to hide from accountability for MUNI's performance. Hopefully it will create incentives where failure is more risky than change and where risk taking and success are rewarded.



In Conclusion:

While public attention surrounding the implementation of Proposition M has focussed on MUNI, the same influences of focus and accountability apply to Water and Hetch Hetchy. And, while money has been less of a problem for these departments, they do work within the same system and have many of the same issues to confront and resolve. The hidden benefit of Proposition M may well be the changes that it fosters within those two departments. Stay tuned...

Respectfully submitted,



Anson B. Moran  
General Manager



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## MUNICIPAL RAILWAY

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The San Francisco Municipal Railway, known as Muni to its patrons, is one of the most widely used transit systems in the nation. In Fiscal Year 1992-93, Muni's ridership was 734,000 passengers each weekday (Monday-Friday), more than the resident population of 727,400. Muni's annual boarding figure for that period was 230 million. Annual boardings per San Francisco resident averaged 318. That's the highest per capita boarding this side of New York City's borough of Manhattan.

Muni ranks seventh in total ridership nationwide, seventh in motor bus ridership, second in streetcar ridership, and first in trolley bus ridership. Locally, of the seven major Bay Area transit systems (Muni, BART, AC Transit, Santa Clara, SamTrans, Golden Gate, and CalTrain), Muni ranks first in ridership. In fact, Muni's weekday ridership figure of 734,000 is nearly as much as all of the other systems' ridership combined, which totals 750,000.

in terms of vehicles, the Muni system boasts one of the most diverse fleets in the United States. During Fiscal Year 1992-93, Muni operated 128 light rail vehicles, 474 diesel coaches, 344 electric trolley buses, 39 cable cars and a small international fleet of 14 historic streetcars.

The challenges Muni faced and met during Fiscal Year 1992-93 to improve and maintain current levels of service in spite of diminishing resources can be broken down into the areas of Vehicle Improvement, Facilities, Infrastructure, Service Enhancement and Community Outreach/Public Relations.

### VEHICLE IMPROVEMENTS

During Fiscal Year 1992-1993, Muni began, continued and completed a number of projects related to the expansion and modernization of its vehicle fleet.

#### Articulated

Trolley Coaches      New Flyer Industries of Canada, the manufacturer of Muni's new 60-foot long articulated trolley coach, delivered a prototype of the new vehicle to Muni for testing, review and comment prior to going ahead with manufacture of 60 coaches scheduled for delivery in Fiscal Year 1993-94.

PCC Streetcars      The rehabilitation of 20 PCC streetcars acquired by Muni from Philadelphia in 1991 proceeded by Morrison Knudsen for replacement of 8 Market trolley coach service on the new F-Market Historic Streetcar line scheduled for start-up in 1995.



New Light Rail Vehicles	A contract for 52 new light rail vehicles (LRVs) was awarded to Breda Costruzione Ferroviarie of Pistoia, Italy. The new fleet will augment and replace Muni's again and problematic Boeing LRVs with delivery scheduled for 1995.
Cable Cars	Muni's expert Carpentry, Special Machine and Paint Shops rebuilt Cable Cars 21 and 49 from scratch as part of the ongoing renovation of those cable cars not rebuilt during the Cable Car Rehabilitation Project in the early 1980's.
Historic Streetcars	Car C-1, an old Muni streetcar from the early part of the century with the same wheelbase as the new Breda LRVs, was renovated for use as a test car and modern day workhorse for the light rail system.
Diesel Buses	In an effort to improve preventive maintenance of diesel buses, Muni created a special Road Service Division to handle diesel bus road calls, thereby freeing diesel divisions to devote their time to preventive maintenance procedures. At the same time, a computer accounting Vehicle Monitoring System (VMS) was established to track each diesel bus closely for scheduled preventive maintenance.

#### **FACILITIES, INFRASTRUCTURE, SERVICE ENHANCEMENT**

Muni is proud of its far-reaching Capital Program designed to meet the changing transit needs of San Francisco well into the next century. A number of projects including improvements to and expansion of both Muni's light rail and trolley coach systems were either completed or launched during Fiscal Year 1992-93.

F-Market Historic Streetcar Line	Construction on the upper Market (Duboce to Castro) segment of the F-Market line went full speed ahead with the installation of new track, overhead lines, boarding islands, and planting of Canary Island palms in the center divide. F-Market service between Castro and the Transbay Terminal using the PCC cars Muni is currently renovating is scheduled to commence in 1995.
Potrero Division	A two-year-long project to modernize and expand Potrero Division, one of Muni's two trolley coach divisions, was completed. Potrero Division is now equipped to service and house both standard trolley buses and the new, larger articulated trolley coaches.



31-Balboa	Overhead line construction to convert the 31-Balboa from diesel operation to trolley coach operation was completed.
14-Mission Trolley Wire Upgrade	A project to replace existing overhead wire and upgrade the power system for the 14-Mission line in order to provide adequate power for Muni's new high capacity articulated trolley coaches began.
Bayshore Corridor	The Bayshore Transit Study was launched to evaluate and propose various public transportation improvements to the Bayview/Hunters Point, Potrero Hill and Visitation Valley neighborhoods, including the possibility of a new light rail line along Third Street.
Advanced Train Control System	Construction of the Advanced Train Control System (ATCS) began in the Market Street Subway and Twin Peaks Tunnel. Once complete in 1996, the ATCS will provide continuous tracking of the Metro cars and control their routing, speed, acceleration/deceleration and location.
J-Church Metro Line	Full-time extension of J line service on new tracks from 30th and San Jose Avenue to the Balboa Park BART Station at Geneva and San Jose began. Phase I of the extension of J Line service to San Francisco State and Stonestown was completed.
Waterfront Projects	The Waterfront Projects Groundbreaking took place in October 1992 while on-going engineering, design and planning for the projects including the Muni Metro Turnback (MMT), the Muni Metro Extension (MMX) and the North and South Embarcadero Roadways continued.

#### **COMMUNITY OUTREACH/PUBLIC RELATIONS**

Among the challenges facing Muni each year is our relationship with the riding public and the City of San Francisco. Adding to this challenge is the fact that monies for printing and community outreach are extremely limited. Nevertheless, with the assistance of other city agencies and the private sector, in Fiscal Year 1992-93, Muni was successful in carrying out several visible community outreach programs.

Graffiti Prevention A yearly gift from Pacific Telesis of \$75,000 to Muni's Graffiti Prevention Program enables Muni to continue to fight graffiti not only on Muni vehicles and facilities, but throughout the



City. In Fiscal Year 1992-93, Muni held "Wipe Out Day" at six different Muni locations in which 200 people, including Mayor Frank Jordan, cleaned and removed graffiti from Muni vehicles.

**Clean/On-Time Program**

In an effort to improve service and Muni's image with the public, Muni launched the Clean/On-Time Program in September 1992 with the hiring of 34 additional car cleaners and 15 street inspectors to make sure that buses were clean and running on time. The On-Time Rebate portion of the program began in January 1993 and lasted through June giving a free ride to those passengers who waited more than 15 minutes beyond the printed frequency for their bus. The program proved, that with adequate resources and personnel, Muni vehicles were cleaner and service improved.

**Newspaper Recycling**

In conjunction with the San Francisco Recycling Program through the Chief Administrative Officer, Muni launched a pilot newspaper recycling program at Embarcadero Station designed for ultimate expansion to all Metro stations if successful.

**Transit Advertising**

Muni gave approval to Transit Displays, Inc. (TDI) its transit advertising agency, to test the feasibility of increasing revenues to Muni by using wrapped bus exterior advertising to cover the sides and back of buses. As part of this program, 2 buses carried a sample wrapped ad for Pepsi's new Crystal Light soda.

**Media Events**

In December, 1992, Muni held a Holiday Parade to commemorate Muni's 3 newest cable cars, 13, 21 and 49. Appearing in the parade were Santa Claus and characters from the San Francisco Nutcracker Ballet and Toys R Us.

Also, in December, Muni celebrated its 80th birthday with a rededication of Car C-1, an old Muni work streetcar, refurbished as a training and materials car for the light rail system.

On Arbor Day, April 30, 1993, Muni held a Celebration of the Palms to mark the planting of the first Canary Island palm trees on the median divide on Market Street as part of construction for the F-Market Historic Streetcar line.



**American With  
Disabilities Act**

To comply with the American With Disabilities Act, Muni launched a Call Out Your Stops Campaign with Muni drivers to remind them to help low-vision and blind passengers to orient themselves while traveling on Muni.

Although this summary of Muni's accomplishments covers the Fiscal Year 1992-93, it is important to note that in calendar year 1993, Muni's total number of systemwide accidents dropped to the lowest figure in 10 years. It was also the third time in that period that the number of traffic and passenger accidents fell below 3,000. In calendar year 1993, the number of Muni accidents systemwide was 2,789 compared to 3,134 in 1992. The accident rate measured per one million miles of service was 113 in 1993 compared to 121 in 1992, surpassed only by the rate of 110 accidents per million miles of service reported in 1989.



## **WATER DEPARTMENT**

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The San Francisco Water Department serves a population of 2.3 million people, providing water to residential, commercial, industrial, governmental and wholesale customers in the San Francisco Bay region. In Fiscal Year 1992-93, the Department delivered 81,767 acre-feet to its 166,000 retail customers in and adjacent to the City and 149,842 acre-feet to its 30 wholesale customers in San Mateo, Santa Clara, and Alameda counties. In the course of meeting its service commitments, the Department successfully confronted many of the challenges which are embodied in the Department's mission statement, namely,

"to provide all customers a safe and potable water supply in adequate quantities, to respond to emergency situations, to equitably charge and collect for water service, to provide for the needs of the present and future through continuous maintenance, planning and improvements, and conduct all departmental operations efficiently and at a reasonable cost."

**The Drought Ends** Fiscal Year 1992-93 marked the end of a five year drought which had gripped California and most of the western United States. Rain and snow during October, December and January at twice the normal rate enabled the Public Utilities Commission in March 1993 to declare the end of the drought and to lift drought restrictions. The Commission replaced its mandatory water rationing program with a voluntary 15% reduction and rescinded the excess use charge adopted during the drought.

During the drought retail and wholesale customers reduced consumption 25% from pre-drought levels. Due in part to the cooperation of both retail and wholesale customers, the Department was able to avoid making the drastic reductions which could have adversely affected the regional economy. Despite the return to normal supply levels, the Department recognized the need to continue to encourage customers to use water wisely. The department continued its program to implement the Best Management Practices for Urban Water Conservation as a means of promoting conservation among its customers.



Water Quality	The Department continued to meet its objective of providing water which meets or exceeds all applicable water quality standards. The Department applied for a waiver from filtration of surface water supplies as required under the regulations implementing the Safe Drinking Water Act. Based on the demonstrated ability of the Department's Hetch Hetchy supply to meet water quality standards without filtration, in June 1993 the California Department of Health Services gave the Department preliminary approval of its request for a filtration waiver. A filtration waiver will enable the Department to avoid building a filtration plant at an estimated cost of \$500 million.
	The Department is continuing its analysis of water quality to evaluate which, if any, alternative forms of treatment are required to ensure water quality. The Department is performing pilot plant testing at various locations in its water system. The pilot plant testing will continue into Fiscal Year 1994-95 and conclude with a report to the California Department of Health Service on the recommended treatment alternative(s).
Watershed Management	The Department manages over 60,000 acres of watershed lands in San Mateo and Alameda counties. In addition to the water supply function, the Department has used the watershed lands to provide revenue through leases for golfing, quarries and cattle grazing. Recently, however, there have been increasing requests from a growing urban population to open the watershed lands for recreational uses such as fishing, hiking, bicycling and pistol and rifle shooting. Because of concerns over the impacts of increased use of water quality as well as the potential conflicts over use, the Department is pursuing Comprehensive Watershed Management Plans for the Crystal Springs and Sunol watersheds. During Fiscal Year 1992-93, the Department initiated a series of public forums as a vehicle for public participation and started work on the master environmental assessment. The development of management plans is expected to take several years to complete.
Maintenance Activities	The Department's maintenance program provided customers with a high level of service. During Fiscal Year 1992-93, the Department replaced 30,000 lineal feet of mains, renewed 1,192 services, added 185 services and replaced 4,000 customer meters. To improve overall performance, a



computerized maintenance management system was implemented in the Water Supply and Treatment Division. The system will facilitate Maintenance scheduling, tracking and reporting. The Department's objective is to install the system at the City Distribution Division during Fiscal Year 1993-94.

- Financial Review** The Department continued to provide excellent customer service despite the financial challenge of drought reduced water sales revenues. Operating revenues in Fiscal Year 1992-93 were \$107,556,000 and operating expenses totaled \$102,889,000. After deducting net non-operating expenses of \$4,259,000, the Department had an operating income before transfers of \$408,000. During Fiscal Year 1992-93, the Department made net operating transfers of \$4,700,000 to the City's General Fund resulting in a net loss for the year of \$4,292,000. Despite reduced cash flows during Fiscal Year 1992-93, the Department was able to meet its critical operating needs and to continue to fund a strong capital improvement program.



## HETCH HETCHY WATER AND POWER

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The Hetch Hetchy Project is a dual-purpose, multi-component hydro electric system. It was created pursuant to the Raker Act of 1913 in which the United States Congress granted the City the rights to develop the Tuolumne River source.

Hetch Hetchy operates as two related but separate water systems and associated power components. The primary system diverts domestic water from the Hetch Hetchy Reservoir to the San Francisco Water Department through the Kirkwood and Moccasin Power Plants. The second system diverts water from Lake Lloyd and Lake Eleanor to the Don Pedro Reservoir through the Holm Power Plant. Water impounded in the Don Pedro Reservoir satisfies the Raker Act entitlements of the Modesto and Turlock Irrigation Districts while allowing greater flexibility in use of domestic water from the Hetch Hetchy Reservoir.

Electric power generated at the three power plants is conveyed through approximately 165 miles of high voltage transmission lines to delivery points for the Modesto and Turlock Irrigation Districts, and through PG&E's system for transmission to San Francisco for municipal purposes.

Hetch Hetchy Water and Power is comprised of four divisions:

- General Administration:** Provides overall management of the Department through monitoring capital improvement projects, negotiating for the purchase and sale of supplemental power and manages power scheduling and billing.
- Project Operations:** Located in Moccasin, this Division is responsible for collection, storage and delivery of domestic water to the San Francisco Water Department and for the generation and transmission of electric power.
- Bureau of Light, Heat and Power:** This Bureau is responsible for all aspects of City street lighting and for billing the various City Agencies for electricity and purchased natural gas. The Bureau operates administratively under Hetch Hetchy Water and Power.

### DESCRIPTION OF THE 1992/93 WATER YEAR

The summer and fall of 1992 marked the beginning of the 7th dry year of the drought. The runoff in that period was 42% of normal. For the up-country reservoirs, Don Pedro Waterbank and Bay Area facilities, the combined storage was 555,000AF, or about 42% of normal. This was a 7% reduction in total



storage when compared to the same period last year. The preceding year's precipitation on our watershed was a disappointing 46% of normal. Water rationing was already in place for the second year. The City had purchased and imported water from outside agencies to augment the demand.

The situation didn't change until December 1993 when close to normal precipitation gradually came to our watershed. By mid-December, both rainfall and snowpack levels were above normal. January and February followed with close to record high precipitation and the water supply outlook was much brightened. Water rationing was canceled in February 1993.

By the end of the fiscal year we had experienced the 13th wettest year of record and the runoff was 146% of normal. The entire system was filled to more than 1,594,000AF, or about 122% of previous normal levels.

**Water Rights**      Drought was not the only challenge which threatened the Department's water supply. Regulatory decisions at the state and federal levels have the potential for affecting the water supplies available to meet the needs of the Department's customers.

Since 1987, the State Water Resource Control Board has been engaged in a dialogue with water suppliers, environmentalists, farmers and other interested parties on water quality standards for the Sacramento-San Joaquin River Delta and the San Francisco Bay. The Board's objective was to develop a consensus regarding how to best meet competing water needs and still provide sufficient water for fish and wildlife habitat.

In December 1992, the Board issued Draft Decision No. 1630 which would have established interim water quality standards for the Bay-Delta. Although the Department does not take water from the Delta, its Hetch Hetchy supply is on the Tuolumne River, a major tributary to the San Joaquin River. As such, the Department may have been required to take some mitigation actions. However, California Governor Wilson, citing potential federal intervention, requested the Board not to implement Decision No. 1630. The Board complied with the Governor's request.

During Fiscal Year 1992-93, the Federal Energy Regulatory Commission held hearings reviewing the status of operations at New Don Pedro Reservoir which is located on the Tuolumne



River. In 1966, the Department entered into an agreement with the Modesto and Turlock Irrigation Districts, owners of New Don Pedro, which entitles the Department to use 540,000 acre feet of storage space in the reservoir. The water stored is used to meet the Department's water supply obligations to the Districts under the Raker Act and California water law.

Pursuant to the Federal Power Act license held by the Districts, the Federal Energy Regulatory Commission is reviewing the status of fisheries on the Tuolumne River. It is likely the Commission will order increased water releases to improve the fish habitat. Under its agreement with the Districts, the Department could be responsible for a portion of any flow increases. The Department and the Districts are involved in negotiations regarding responsibility for any flow increases. The Department's goal is to avoid responsibility for increasing flows during an extended drought.

#### FINANCIAL RESULTS FOR FY 92/93

Hetch Hetchy's budget of \$89.7 million for 1992-93 was based on a revenue estimate of \$81.4 million and a deobligation of \$5.1 million in capital projects. The significant budget issues for the department continue to be those of : 1) meeting the revenue projections; 2) funding the legal services of water rights issues; 3) meeting the general fund contributions; and 4) funding the capital program.

Through our membership in the Western Systems Power Pool, our purchase of power budget was decreased due to our ability to obtain lower cost economy power on the spot market. As a result of the passage of Proposition A, early retirement, the Department was able to make organizational changes without adverse impact on existing employees. The Department had a net reduction of four employees and \$251,440 in personnel costs.

The 1992-93 capital budget was \$16.5 and included funds to: replace deteriorated cement motor on the San Joaquin pipeline; perform seismic and structural upgrades of the old Moccasin powerhouse to meet the current building codes; rehabilitate the Eleanor Dam to prevent leakage and protect the concrete from additional damage from the annual freeze-thaw action; and rebuild and maintain Hetch Hetchy roads to ensure access to all power generating and water control facilities.

The Bureau of Light, Heat and Power's budget increased by \$2.7 million. The



increase was due primarily to projected higher consumption of gas and electricity by City Departments and higher rates, and street lighting maintenance and repair contracts.

Overall the final financial results were better than anticipated due primarily to the record water year. Actual revenues exceeded the budget forecast. The actual revenue from the sales of power exceeded the forecast by \$6.6 million. Our membership in the Western System Power Pool provided Hetch Hetchy with new customers for excess energy sales.

While most of our operating costs remained within budget, purchase of power costs were down by almost \$3 million. Hetch Hetchy's contribution to the General Fund for FY 92/93 was \$19.5 million, an increase of \$2.5 million over the initial budget forecast, and an increase of \$8.5 million over the preceding fiscal year. This was in addition to the direct transfer of Muni.

#### GENERAL ADMINISTRATION ACHIEVEMENTS

Administration replaced the old complex system of billing General Fund Departments with a single average rate. Additionally the billing system was being automated and integrated to use a common and consistent data set. This will reduce data entry efforts and errors and insure the tracking from load forecasting through generation planning, recorded generation, purchase and sales of power and the issuance and authorization for the payment of bills. It provides improved flexibility to buy and sell power and gives us better compliance with long term agreements.

Additionally, staff has improved its ability to strike beneficial deals in the buying and selling of supplemental energy through the Western Systems Power Pool, a defacto commodity exchange where power is bought and sold on a half hour basis from multiple buyers and sellers. We sold run off associated excess energy to non-investor owned utilities as far away as Canada and New Mexico. In addition, we did a seasonal power exchange with British Columbia saving the City half a million dollars in power purchases.

The Department has improved its management of the water and power resources. A new runoff projection system improved our understanding of potential outcome of water conditions. New operating plans were developed to optimize the water supply by decreasing spill through anticipation of runoff conditions and improved use of regulating reservoirs.



We have improved our long term projection of electrical load. The City's annual peak has been reevaluated and projected as lower than previously calculated. This will increase sales to the Modesto and Turlock Irrigation Districts in future years.

#### PROJECT OPERATIONS/MAINTENANCE ENGINEERING ACHIEVEMENTS

##### ARCHIVES

Due to its age and the fact that much of the Hetch Hatchy system remains largely unaltered from its original design and operational methodology and due also to the fact that much of Hetch Hatchy's legal position rests on documents which are now as much as eighty years old, a concerted effort has been made to collect and archive Hetch Hatchy drawings and documents. These archives are housed largely in the new archive building at Moccasin. During 1992/93 approximately 18,000 drawing and 500 banker boxes of documents were entered into a computerized archival system for easy retrieval during 1992/93. Hetchy Engineering, Operations and the City Attorney's office are utilizing the system extensively in their daily work.

##### ENVIRONMENTAL PROGRAM

Hetch Hatchy has developed a very aggressive new environmental program designed to bring the Department into compliance with all environmental laws with regard to both facilities (worker and public environmental safety) and general ecological safety. This program has resulted in an extensive and exhaustive study of all waste streams which may impact on the state waterways and thereby come under the regulatory jurisdiction of the Regional Water Quality Control Board (RWQCB). All such waste streams were reported to RWQCB (and personally inspected by the RWQCB engineer) as required by law and extensive engineering and operational improvements are underway to enable Hatchy to either eliminate or acquire operating permits for such waste streams. Sites of possible ground and ground water contamination have been identified and are either currently being remediated or are scheduled for full characterization studies during the next year. A complete facilities asbestos identification project has been completed under the Health Department Asbestos Program. Asbestos abatement projects have been completed at the Moccasin



Administration Building, Lake Eleanor and Lake Lloyd facilities. Asbestos remediation and containment in the powerhouses and living facilities will be completed during the summer of 1994. A lead paint abatement program has been planned and will be implemented as regulatory requirements are developed.

## PROJECTS

### IMPROVEMENTS AT POWERHOUSES

Consistent with the Unit Upgrade Study results projects have been completed which have the result of increasing the thermal tolerance of transformers at both Holm Power Houses. The thermal tolerance being the chock of limiting factor in the overall capacity of the units to generate power. This project cost approximately \$125,000 and will provide full pay-back in roughly one year. The life expectancy of these units and improvement range up to 30 years.

### MOCCASIN SEWER SYSTEM REHABILITATION

As a result of over burdening of the Moccasin sewer system by ground water intrusion during the 150% of normal rainfalls of 1992/93, a major upgrading of the sewer piping system was completed under an emergency contract. This work has prolonged the life and utility and ecological soundness of the existing system.

### NEW ENGINEERING ARCHIVE FACILITY AT MOCCASIN

Consistent with its need for a facility for on site AND engineering and construction staff and a home for its extensive archive activity Hetch Hatchy has procured and is currently occupying a two building complex comprised of modules. These units include a large archive room, storage rooms and twenty engineering offices. Previously many of these functions were housed in the seismically unsafe old Moccasin Powerhouse.

### NEW PHONE SYSTEM LINKING MOCCASIN AND SAN FRANCISCO

Responding to the need to make communications between Moccasin and San Francisco more effective and less expensive Hetch Hatchy has installed a phone linking system which supports extensive communications options including a modern Voice Mail function and on line compute interface including Email. This system has had the effect of minimizing the negative effects of the remote location of the Moccasin facility.



## BUREAU LIGHT, HEAT AND POWER

In 1992/93 the Bureau achievements included:

- o Conversion of City-owned street lights to high pressure sodium vapor (HPSV) continued.
- o Completion of the design for the street lights for the Sutro Heights Area as well as the No. 14 Mission Line Phase 1. Both projects will use HPSV lights to improve illumination and conserve energy.
- o Converting DeHaro Street between Division and 17th Streets from 175-watt mercury vapor lights to 100-watt HPSV lights. Additionally 191 incandescent street lights were changed to HPSV lights in the Diamond Heights Area. In addition, 27 lights in the Fitzgerald / Griffith / Cameron / Nichols Area were also changed to 100-watt HPSV. The change will conserve energy and improve illumination and is part of the overall City plan to meet its conservation goals and increase protection on city streets.



## PUC BUREAUS

The Public Utilities Commission's three departments, Municipal Railway, Hetch Hetchy Water and Power and the Water Department, receive administrative and technical support from five service bureaus. This approach eliminates duplication of effort and contributes to more efficient operations.

### BUREAU OF ENERGY CONSERVATION

The Bureau's mission is to reduce energy use in city facilities and to promote energy efficiency in the private, commercial and housing sectors. The Bureau operates a number of different programs addressing energy use in City government facilities. Most of them seek to not only save energy through increased efficiency, but also to save money through reducing the operations and maintenance demands on staff, and to improve working conditions through better lighting and heating. The Bureau provides energy management programs and services to all departments of the City. Recent highlights include:

- o During the drought investing some \$880,000 on energy efficiency projects in the City facilities most of which will pay back in three to five years.
- o Performing approximately ten lighting retrofits in city facilities each year totalling over \$300,000 in lifetime energy savings in addition to improving working conditions and lowering maintenance requirements.
- o Providing technical review and upgrades of the City's dual-fuel boiler plants in order to insure dual fuel capability which will qualify the boilers for special natural gas rates saving the City thousands of dollars each year.
- o Developing a Guidebook of energy efficient lighting design guidelines for new construction and major renovations.
- o Shifting pumping at the Water Department's Crystal Springs Reservoir to off-peak periods to achieve savings in annual peak demand charges.

### UTILITIES ENGINEERING BUREAU (UEB)

The Utilities Engineering Bureau provides project management, design and field engineering, and contract administration for the \$750 million capital improvement program of the Public Utilities Commission. The program comprised 65 projects



worth \$150 million for the Hetch Hetchy Water and Power and San Francisco Water Departments, and 22 projects with a total value of \$600 million of the San Francisco Municipal Railway (Muni).

Major accomplishments for 1992-93 include:

- o The Muni Metro Turnback construction contract was certified and awarded to the construction firm of Tutor-Saliba/Petrini, a joint venture. The Muni Metro Turnback is a \$202.3 million project which will provide a new light rail turnback south of the Embarcadero extension. Notice to proceed is expected in September, 1993 when federal funds are available to allow construction to start.
- o Reconstruction of the trolley overhead facilities on the No. 30 Stockton line was completed, a \$6.4 million project that extends through San Francisco's Marina, North Beach, Chinatown and Union Square neighborhoods.

Several major Muni projects started construction in 1992-93:

- o South Embarcadero between Folsom and Third Street, the first phase of a \$52 million project to extend Muni Metro light rail system from the Muni Metro Turnback to a terminus adjacent to the CalTrain Depot. This project supports the proposed expansion of Muni Metro service to the redeveloping South of Market areas of South Beach, Rincon Point and Mission Bay.
- o Upper Market Street between Castro and Duboce, the first phase of a \$132 million program to extend the F-Line historical trolley and presidential conference car service on the surface of Market Street from Castro Street to Fisherman's Wharf along the north Embarcadero.
- o 19th Avenue Improvements between Holloway and Winston, the first phase of an \$11 million project to install crossover tracks for Muni Metro J and M lines, and central passenger platforms with canopies near S.F. State University and Stonestown.
- o Mission Street between Persia and Daly City, the first phase of a \$22 million project to construct new overhead lines and to rehabilitate various aging segments of the trolley overhead facilities on the No. 14 Mission line from Fourth Street to Daly City.



## BUREAU OF FINANCE

The Bureau provides financial management, payroll, accounting, and revenue collection services and claims processing for all PUC departments and bureaus. Noteworthy accomplishments during 1992-93 were:

- o Completed the Water Department's fixed assets inventory, the first since 1983! This inventory is now on a biennial schedule.
- o Installed nine change machines in the Metro subway.
- o Entered into a contract with a new Fast Pass vendor to produce passes with holograms and reduce the level of fare evasion from photocopied passes.
- o Initiated the Cable Car program to replace Autelca machines at Powell and Market Streets as well as at Victorian Park with pass sales conducted by personnel stationed daily from 9:00 a.m. until 9:00 p.m.
- o Successfully concluded negotiations for the Full Funding Grant Agreement for the Muni Metro Turnback Project.
- o Processed grant applications resulting in the award of nearly \$190 million for Muni's capital program and operating support.

## BUREAU OF MANAGEMENT INFORMATION SYSTEMS (BMIS)

The Bureau of Management Information Systems (BMIS) provides data processing and office automation services to the departments and bureaus of the Public Utilities Commission. BMIS operates a large central computer center on a 24 hour/day, 7 day/week basis.

This Bureau develops and refines computer systems that process water billing data, systems that support the vehicle maintenance activities of the Municipal Railway, systems that control the inventory of spare parts for Muni vehicles, and numerous other systems that process financial and administrative data.

During FY 92/93 much emphasis was placed on improving the efficiency and reliability of these computer systems. By refining our internal procedures and through the use of better technologies we were able to achieve the following:

- o Maintained better than 99% availability of on-line computer network with more than 300 terminals.



- o Reduced the number of trouble calls from an average of 60/day to less than 10/day.
- o Reduced staffing in the computer room from 3 shifts per day to 2 shifts per day.

The use of office technology by PUC departments and bureaus was expanded during this fiscal year. BMIS staff installed more than 100 micro computers at many PUC locations. Many of these PCs were networked to the central computer to provide on-line access to financial, purchasing and contract status information.

A new system was implemented that collects, summarizes and reports daily cash receipts of all fareboxes that were installed in Muni vehicles thereby providing an extra measure of control for the revenue function.

Also, a new computer system was installed for the Supply and Treatment Division of the Water Department to control the maintenance and workorder activities of this organization.

#### **BUREAU OF PERSONNEL & TRAINING**

The Bureau of Personnel and Training is liaison for the Department of Human Resources and provides personnel services in recruitment, classification position control, labor relations, Equal Employment Opportunity and personnel policy and procedures. Key activities include:

- o Developing examinations and posting eligible lists for high priority PUC positions.
- o Developing PUC policy and procedure to implement Americans With Disabilities Act.
- o Updating PUC Affirmative Action Plan.



**FINANCIAL STATEMENTS**

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## SAN FRANCISCO MUNICIPAL RAILWAY

**Balance Sheet**  
 For the year ended June 30, 1993  
 (in thousands)

**ASSETS**

## Current assets:

Cash - principally equity in deposits and investments of the City Treasurer .....	\$ 380
---	--------

## Receivables:

Grants .....	32,408
Sales tax .....	8,804
From City General Fund .....	35,161
Other .....	8,165

## Materials and supplies .....

<u>17,299</u>
---------------

## Total current assets .....

<u>102,217</u>
----------------

## Restricted assets:

TIDF - cash and receivables .....	73,599
Other .....	<u>1,563</u>

## Total restricted assets .....

<u>75,162</u>
---------------

## Property, Plant &amp; Equipment (net) .....

<u>491,499</u>
----------------

**TOTAL ASSETS**

<u><b>\$ 668,878</b></u>
--------------------------

**LIABILITIES AND CAPITAL**

## Current liabilities:

Overdraft with City Treasurer .....	\$ 50,026
Accounts payable and accrued expenses .....	8,795
Current portion of accrued vacation, sick leave and workers' compensation .....	12,303
Accrued payroll .....	5,811
Current portion of accidents claims liability .....	7,500
Other .....	<u>7,988</u>

## Total current liabilities .....

<u>92,423</u>
---------------

## Long-term liabilities:

Accrued vacation, sick leave and workers' compensation .....	27,248
Accident claims liability .....	11,621
Other .....	<u>6,776</u>

## Total long-term liabilities .....

<u>45,645</u>
---------------

## Total Liabilities .....

<u>138,068</u>
----------------

## Capital:

Contributed capital .....	409,492
Retained earnings .....	<u>121,318</u>

## Total Capital .....

<u>530,810</u>
----------------

**TOTAL LIABILITIES AND CAPITAL**

<u><b>\$ 668,878</b></u>
--------------------------



## SAN FRANCISCO MUNICIPAL RAILWAY

Statement of Operations  
For the year ended June 30, 1993  
(in thousands)

Operating revenues:	
Passenger fares	\$ 89,571
Advertising	<u>1,966</u>
Total operating revenues	<u>91,537</u>
Operating expenses:	
Transportation	141,935
Vehicle maintenance and repairs	58,754
Nonvehicle maintenance and repairs	21,828
General and administrative	51,001
Depreciation and amortization	24,013
Paratransit operations	<u>8,563</u>
Total operating expenses	<u>306,094</u>
Operating Income(Loss)	<u>(214,557)</u>
Nonoperating revenues(expenses):	
Operating assistance:	
Transportation Development Act Funds	16,653
Sales tax	17,607
Federal operating assistance	7,574
State Transit Assistance funds - net	6,853
Bridge toll funds	3,159
San Francisco County Transportation Authority	3,650
Transit Impact Development Fees	10,463
Interest expense	(656)
Gain on disposal of property, plant and equipment	13
Other - net	<u>2,224</u>
Total nonoperating revenues, net	<u>67,540</u>
Loss before operating transfers	<u>(147,017)</u>
Operating transfers:	
From the City and County of	
San Francisco - General Fund Support	112,272
From SFMRC	3,833
From Hetch Hetchy	2,800
From other funds	<u>477</u>
Net Income(Loss)	<u>\$ (27,635)</u>



## SAN FRANCISCO WATER DEPARTMENT

**Balance Sheet**  
 For the year ended June 30, 1993  
 (in thousands)

**ASSETS**

Property, plant and equipment (net)	<u>\$ 372,621</u>
-------------------------------------	-------------------

**Restricted assets:**

Equity in deposits and investments of the City Treasurer	43,099
Investment in escrow	999
Investment held by trustee	109,077
Interest receivable	<u>1,554</u>

Total restricted assets	<u>154,729</u>
-------------------------	----------------

**Current assets:**

Cash	98
Equity in deposits and investments of the City Treasurer	49,698
Receivables:	
Water and Power	10,271
Interest and other	1,297
Receivables from the City	646

Materials and supplies	<u>2,448</u>
------------------------	--------------

Total current assets	<u>64,458</u>
----------------------	---------------

<b>TOTAL ASSETS</b>	<u><b>\$ 591,808</b></u>
---------------------	--------------------------

**EQUITY AND LIABILITIES**

Fund Equity	<u>\$ 266,108</u>
-------------	-------------------

**Long-term debt:**

General obligation bonds	7,455
Revenue bonds	<u>275,609</u>
Total long-term debt	<u>283,064</u>

**Other long-term liabilities:**

Accrued vacation, sick leave and workers' compensation	5,113
Damage and claims liability	2,793
Other	<u>3,976</u>

Total long-term liabilities	<u>11,882</u>
-----------------------------	---------------

**Current liabilities:**

General obligation bonds	1,270
Revenue bonds	4,820
Accounts payable	8,812
Accrued payroll	1,291
Current portion of accrued vacation, sick leave and workers' compensation	2,697
Current portion of damage and claims liability	2,750
Suburban water rate agreement	2,797
Other	<u>6,317</u>

Total current liabilities	<u>30,754</u>
---------------------------	---------------

<b>Total Liabilities</b>	<u><b>325,700</b></u>
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<b>TOTAL EQUITY AND LIABILITIES</b>	<u><b>\$ 591,808</b></u>
-------------------------------------	--------------------------



## SAN FRANCISCO WATER DEPARTMENT

Statement of Operations  
 For the year ended June 30, 1993  
 (in thousands)

Operating revenues:	
Water sales	\$ 102,035
Rental income	3,998
Service installation income	<u>1,523</u>
Total operating revenues	<u>107,556</u>
Operating expenses:	
Hetch Hetchy water assessment	14,542
Transmission and distribution	16,982
Operations and maintenance	33,564
General and administrative	20,687
Depreciation and amortization	15,126
Property taxes	<u>1,988</u>
Total operating expenses	<u>102,889</u>
Operating Income	<u>4,667</u>
Nonoperating revenues(expenses):	
Interest income	12,769
Interest expense	(18,709)
Gain on disposal of property, plant and equipment	87
Other	<u>1,594</u>
Total nonoperating revenues, net	<u>(4,259)</u>
Income before operating transfers	408
Operating transfers from (to) the City:	
Tax Support	2,003
General fund	<u>(6,703)</u>
Net Income(Loss)	<u>\$ (4,292)</u>



## HETCH HETCHY WATER AND POWER

**Balance Sheet**  
 For the year ended June 30, 1993  
 (in thousands)

**ASSETS**

Property, plant and equipment (net)	<u>\$ 267,072</u>
-------------------------------------	-------------------

## Restricted assets:

Equity in deposits and investments of the City Treasurer	564
---	-----

## Current assets:

Cash	20
------	----

Equity in deposits and investments of the City Treasurer	36,066
---	--------

## Receivables:

Water and Power	5,260
-----------------	-------

Interest and other	606
--------------------	-----

Receivables from the City	6,670
---------------------------	-------

Materials and supplies	1,964
------------------------	-------

Total current assets	<u>50,586</u>
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<b>TOTAL ASSETS</b>	<u>\$ 318,222</u>
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**EQUITY AND LIABILITIES**

Fund Equity	<u>\$ 305,075</u>
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## Other long-term liabilities:

Accrued vacation, sick leave and workers' compensation	1,451
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Damage and claims liability	498
-----------------------------	-----

Other	31
-------	----

Total long-term liabilities	1,980
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## Current liabilities:

Accounts payable	5,273
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Accrued payroll	412
-----------------	-----

Current portion of accrued vacation, sick leave and workers' compensation	790
--	-----

Payables to the City	4,066
----------------------	-------

Other	626
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Total current liabilities	11,167
---------------------------	--------

Total Liabilities	<u>13,147</u>
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<b>TOTAL EQUITY AND LIABILITIES</b>	<u>\$ 318,222</u>
-------------------------------------	-------------------



HETCH HETCHY WATER AND POWER

Statement of Operations  
For the year ended June 30, 1993  
(in thousands)

Operating revenues:	
Water sales	\$ 14,874
Electricity sales	71,309
Rental income	<u>94</u>
Total operating revenues	<u>86,277</u>
Operating expenses:	
Purchased energy	16,909
Transmission and distribution	10,931
Operations and maintenance	3,125
General and administrative	13,842
Depreciation and amortization	8,953
Property taxes	<u>940</u>
Total operating expenses	<u>54,700</u>
Operating Income	<u>31,577</u>
Nonoperating revenues(expenses):	
Interest income	2,134
Interest expense	(17)
Operation of Municipal Railway overhead lines	(4,590)
Gain on disposal of property, plant and equipment	1
Other	<u>117</u>
Total nonoperating revenues, net	<u>(2,355)</u>
Income before operating transfers	29,222
Operating transfers from (to) the City:	
Tax Support	23
General fund	<u>(22,323)</u>
Net Income(Loss)	<u>\$ 6,922</u>





PUBLIC UTILITIES COMMISSION  
Annual Report FY 1993-94  
City and County of San Francisco

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City and County of San Francisco

Annual Report

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Frank M. Jordan, Mayor

Anson B. Moran, General Manager

Commissioners

Kay K. Yu, President

Micheal E. Hardeman, Vice President

E. Dennis Normandy

James D. Jefferson

Morton Miller

Romaine A. Boldridge, Secretary



## THE PUBLIC UTILITIES COMMISSION

The Public Utilities Commission is an agency of the City and County of San Francisco. In 1932, the San Francisco Charter created a Public Utilities Commission to take over the operations and management of the then present and any future public utilities. The utilities currently within the Commission's jurisdiction include the San Francisco Water Department, the Hetch Hetchy Project and the San Francisco Municipal Railway. Each of these utilities operates separately and maintains separate enterprise funds.

Under the provisions of the Charter, responsibility for maintenance, operation and development of these utilities has been vested in the five-member Commission. Commission members are appointed by the Mayor to four-year terms. As provided in subsection 3.591 of the Charter:

"The Public Utilities Commission shall have charge of the construction, management, supervision, maintenance, extension, operation and control of all public utilities and other properties used, owned, acquired, leased or constructed by the City and County, excepting airports, for the purpose of supplying any public utility service to the City and County and its inhabitants, to territory outside the limits of the City and County, and to the inhabitants thereof."



City and County of San Francisco

## PUBLIC UTILITIES COMMISSION

1155 Market Street  
San Francisco, CA 94103  
(415) 554-3160

October 14, 1995

The Honorable Public Utilities Commission  
City and County of San Francisco  
1155 Market Street  
San Francisco, CA 94103

Dear Members,

In accordance with City Charter Sections 3.600 and 3.501 this annual report for Fiscal Year 1993-94 is hereby submitted.

Each of the PUC departments and bureaus have summarized their principal activities of 1993/94 in the following pages. In this memo I will share some of my observations.

The most significant work of the 1993/94 fiscal year was the passage of Proposition M in November, 1993 and its implementation on June 28, 1995. Proposition M established a Public Transportation Commission and transferred jurisdiction over MUNI and its employees to that commission from the PUC.

The process of making the Prop. M transition took a great deal of care. Not only did MUNI change its leadership, but PUC bureaus which were established to serve the common needs of Water, Hetchy and MUNI had to be divided. Our concern was that functions and effectiveness be preserved and that our employees be treated fairly and in accordance with law and MOU provisions. I take considerable personal pleasure in the fact that we succeeded to a remarkable degree. The actual transfer of function on June 28, 1995 occurred without a ripple. Subsequent events have shown the efficacy of what was done.

The product of the Prop. M transition was to set both transportation and water/power functions on new paths, with



new oversight (Commissions and Commissioners) and greater clarity of purpose. I will leave it to future annual reports to assess the outcome. But one effect is to make this report read like very old news.

There are some days when MUNI seems very distant, others when the issues, memories and people of MUNI seem very close. But mostly, we have been too busy to spend much time looking back. With this, the final PUC annual report which includes MUNI, we are reminded of our past shared purpose and wish them well.

Respectfully Submitted,



Anson B. Moran  
General Manager



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## MUNICIPAL RAILWAY

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The San Francisco Municipal Railway -- Muni -- is one of the most widely used and diverse transit systems in the U.S., boasting an operating vehicle fleet of 39 cable cars, 128 light rail vehicles (Muni Metro service), 455 diesel buses, 402 trolley buses and 13 historic streetcars.

The challenges Muni faced in 1993-94 were highlighted by the voter mandate to create the new San Francisco Public Transportation Commission (SFPTC). During 1993-94, Muni successfully confronted the difficulty of maintaining service levels, bettering communications with the public and implementing improvements to its infrastructure, facilities and vehicle fleet while resources continued to erode, ridership declined, and employee morale was affected by hiring and salary freezes.

### THE SAN FRANCISCO PUBLIC TRANSPORTATION COMMISSION

The most significant event affecting Muni in 1993-94 was the November 1993 election in which San Franciscans voted to remove Muni from the jurisdiction of the San Francisco Public Utilities Commission (SFPUC), and place it under its own Public Transportation Commission. This ballot measure -- Proposition M -- was part of a broader message from elected officials and Muni passengers that they wanted an immediate improvement in Muni service. Specifically, complaints about schedule adherence, operator courtesy, vehicle cleanliness and crime on Muni are strongly associated with having a designated Public Transportation Commission oversee and improve Muni operations.

During much of 1993-94, preparations for transferring Muni from the umbrella of the Public Utilities Commission to the new Transportation Commission took place. These included the restructuring of responsibilities and reappointment of personnel whose functions were Muni specific but were previously assigned to PUC bureaus. On June 28, 1994, the new San Francisco Public Transportation Commission was born with the swearing in by Mayor Frank Jordan of five commissioners -- Kay Yu and James Jefferson, who were transferred to the new SFPTC from the SFPUC, plus three brand new commissioners: Arlene Chew Wong, Joan Rummelsburg, and Jon Ballesteros. At the same time, Mayor Jordan announced the appointment of San Francisco's first Director of Public Transportation, Philip H. Adams, charging him with carrying out the Mayor's goal of making the San Francisco Municipal Railway the very best public transit system in the nation.



## RIDERSHIP

1993-94 saw a decline in weekday ridership from 734,000 in 92-93 to 697,000, in large part caused by reduced state and local funding levels, which contributed to lower vehicle and operator availability and subsequent missed service. Nevertheless, locally Muni continued to rank first in total ridership of the seven major Bay Area transit systems (Muni, BART, AC Transit, Santa Clara, SamTrans, Golden Gate and CalTrain). In fact, Muni has 11 lines with over 20,000 riders each on weekdays, and the five-line Muni Metro system has more weekday ridership than Golden Gate Transit, SamTrans and CalTrain combined. Muni's 38/38L Geary and 14 Mission each have more weekday ridership than Golden Gate Transit and CalTrain together. Nationwide, Muni continues to rank seventh in total ridership, seventh in motor bus ridership, second in streetcar ridership and first in trolley bus ridership.

## FARES

In August 1993, Muni raised its discount fares, pass prices and cable car fares, and the following October eliminated transfers, replacing them with a \$2.25 day pass and a \$9.00 weekly pass. The elimination of transfers and the institution of day and weekly passes lasted only five months until March 1, 1994, when the special passes were eliminated and transfers were reinstated. The August fare increase stayed in place with discount fares rising from 25 cents to 35 cents, discount passes from \$5.00 to \$8.00, Fast Passes from \$32 to \$35, and Cable Car fares from a \$3.00 roundtrip to a \$2.00 one-way fare. The regular adult cash fare stayed the same at \$1.00.

Also during 93-94, Muni began printing its Fast Passes with holograms in an effort to combat counterfeiting.

## SERVICE DELIVERY

In spite of the fact that Muni's Operations Department functioned for two consecutive Fiscal Years 93 and 94 with 40% fewer management personnel and 11% fewer supervisory employees, service levels were maintained at their targeted rate and accident levels declined.

- o Maintained target of 3,752,524 hours of scheduled service
- o Reduced accident rate from 119 per million miles of travel to 108 per million miles.



## **COMMUNITY OUTREACH/MARKETING**

Efforts to improve Muni's relationship with the public continued through an expanded Community Affairs outreach and marketing program.

- o Community liaison provided for South Embarcadero, North Embarcadero and Muni Metro Turnback projects, including organizing groundbreaking for Muni Metro Turnback.
- o Liaison with Powell Street Merchants Association to stop cable car ticket scam, clean up area and improve visitor relations
- o Community liaison and outreach for 19th Avenue Platform and Improvement Project, Muni Metro Key Stops Project, Market Street Transit Thoroughfare Project, Ramped Taxi Event, Yielding Seats Campaign, 14- Mission Overhead Reconstruction Project, Talking Signs Publicity and "Muni Takes You There" Poster Series.
- o Created new cable car souvenir ticket, including point of purchase promotional material and establishment of vendor network.
- o Celebrated sale of the millionth Passport to a visitor from Spain.

## **INFRASTRUCTURE, FACILITIES AND VEHICLES**

Muni's massive Capital Improvement Program continued to lead the Department toward the 21st Century with completed and ongoing projects, foremost of which was the contract with Breda Costruzione for the construction and purchase of 52 new light rail vehicles.

- o Notice to proceed and groundbreaking for construction of the Muni Metro Turnback, a \$212 million contract to extend the trackway from the existing subway system at the foot of Market Street at the Embarcadero Station to street level at the Embarcadero near Folsom Street.
- o Completion of new trackway on Upper Market from Castro to Duboce, a \$13.9 million contract as part of the F-line Project to run PCC streetcars along Market Street and the Embarcadero to Fisherman's Wharf.



- o Completion of the design of trackway on Upper Market from Duboce to 11th Street, an estimated \$9.4 million contract to construct new trackway as part of the F-line Project.
- o Continuation of design and installation of Advanced Train Control System for the Muni Metro subway, a \$68.4 million project.
- o Delivery of 60 new articulated trolley coaches from New Flyer Industries of Canada.
- o Completion of Phase A of the 19th Avenue Improvement, a \$10.7 million project to install crossover tracks for the Metro J and M lines, and central passenger platforms and transit shelters on 19th Avenue near Stonestown and San Francisco State University.
- o Completion of Phase A of the No. 14 Mission Overhead Reconstruction, a \$23 million project to rehabilitate various aging segments of the trolley overhead network.



## WATER DEPARTMENT

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The San Francisco Water Department serves a population of 2.3 million people, providing water to residential, commercial, industrial, governmental and wholesale customers in the San Francisco Bay region. In Fiscal Year 1993-94, the Department delivered 87,000 acre-feet to its 166,000 retail customers in and adjacent to the City and 168,000 acre-feet to its 30 wholesale customers in San Mateo, Santa Clara, and Alameda counties. In the course of meeting its service commitments, the Department successfully confronted many of the challenges which are embodied in the Department's mission statement, namely,

"to provide all customers a safe and potable water supply in adequate quantities, to respond to emergency situations, to equitably charge and collect for water service, to provide for the needs of the present and future through continuous maintenance, planning and improvements, and conduct all departmental operations efficiently and at a reasonable cost."

Those challenges included obtaining filtration avoidance status; maintaining water quality standards; operating and maintaining its pipelines and facilities; working towards the development of alternative water supplies, including continued water conservation; and developing and enhancing the contribution of its employees.

### **WATER QUALITY**

The Department continues to meet its objective of providing water which meets or exceeds all applicable water quality standards.

Filtration Avoidance - The U.S. Environmental Protection Agency officially granted the Hetch Hetchy Aqueduct "filtration avoidance" status. That declaration culminated a two year effort to negotiate a regulatory compliance order that did not require the construction of a filtration plant at a cost of \$500 million due to the exceptional quality of the Hetch Hetchy water supply. The process to maintain the "filtration avoidance" status continued through the balance of the year with efforts to enhance protection of the watershed, improve system and water treatment operations and complete treatment studies. The Department continues its analysis of water quality to evaluate which, if any, alternative forms of treatment are required to ensure water quality.



EPA Lead and Copper Rule - The Department prepared and submitted the EPA required Lead and Copper Corrosion Treatment Study, a comprehensive report that presented years of corrosion research and monitoring by Water Quality Division forces and engineering consultants. The report made recommendations to minimize SFWD consumer exposure to lead and copper in drinking water, in full compliance with the provisions of the 1991 EPA Lead and Copper Rule.

Cross Connection Control - 4,900 backflow prevention devices were tested in the City; additionally, 332 consumer water quality complaints were responded to within the targeted one day response time.

Watershed Master Plan - A key to water quality is the protection of source water. SFWD continued work on its 4-year Watershed Master Planning effort which looks towards developing prudent policies and procedures to integrate recreational and educational uses of the watershed with its primary purpose of protecting water quality.

## **WATER SUPPLY**

Post-Drought - Although Fiscal Year 1993-94 was the fourth driest year of record state-wide, above normal precipitation in 1992-93 allowed the Department to begin the year with adequate water storage to avoid implementing any drought restrictions.

Groundwater/Reclaimed Water - Work has continued on the draft Groundwater and Recycled Water Master Plan, however, the deadlines originally mandated by the Board of Supervisors could not be met. An extension of two years was granted by the Board, making the completion date November, 1996. The Recycled Water Plan is being planned jointly with the Fire Department's needs to increase their high pressure system into the westside and southern parts of the City. The Groundwater master Plan is focusing its efforts on the Westside and Lobos



basins due to the larger size of the basins and the assumption of potential potable as well as non-potable uses.

## SYSTEM IMPROVEMENTS

Continued Improvements to the system help to make the system healthy. While there are a myriad of "big ticket" items under consideration for funding to improve the system's ability to withstand seismic activity, provide redundancy, improve system efficiency and guarantee water quality, several smaller, yet much needed improvements were accomplished during the fiscal year. Most noteworthy are: The System Risk Analysis, Phase I was completed; a Surge Analysis of the transmission system was completed; a fast track design of the axial slip joints on BDPL #3 & #4 was completed and construction was started; major progress was made in the final design of Crystal Springs Pipeline #1 replacement; slip lining of San Andreas Pipeline No. 3 south of Baden Pump Station was completed, with the pipeline returned to service; and construction was started on the Millbrae north shops project.

## MAINTENANCE AND OPERATIONS

The lifeblood of the system is the ability to store, treat, and move water to the Department's customers. Maintenance of the operating system (dams, reservoirs, filter plants, pump stations and transmission and distribution mains) is a key component of the SFWD's efforts to meet these goals.

During the course of the fiscal year, the following major operations and maintenance activities occurred: 16 miles of Suburban transmission main were inspected; 5.25 miles of distribution mains in the City were replaced; the service renewal program continued during the year, replacing approximately 2,200 services; 162 main breaks, an all time record, were repaired and water service restored; in-City reservoirs, Potrero Heights and College Hill, were drained, inspected and cleaned; the



north basin of Sunset Reservoir was drained and inspected, with cleaning scheduled for FY 1994-95; main flushing to improve water quality was done on an ongoing basis in the City; maintenance on over 500 trucks, cars, diesel engines and assorted equipment was performed.

## ENVIRONMENTAL

Management Training - The Water Department sponsored an in-house training program on environmental and regulatory affairs for approximately 100 managers and supervisors. Over the course of several weeks, each employee received 10 hours of training. The intent of the training was to provide decisionmakers with a summary of environmental and regulatory information so that, during the course of future department projects and operations, the activities of city personnel and contractors could be better directed to remain in compliance with environmental regulations.

Lake Merced - Environmental and recreational needs for Lake Merced and its surroundings were enhanced when SFWD introduced 5 million gallons per day into the lake, packaging the water deliveries around the nesting patterns of local bird populations, and raising the lake level on a temporary basis by 2 feet each time. Since chlorinated water could not be introduced directly into the lake, it was necessary to design and construct a dechlorination facility: this system successfully delivered dechlorinated water to the lake and can continue to do so when the need arises.

## WATER CONSERVATION

Free conservation audits to the top 10% of all commercial accounts were offered. This program is one of the Best Management Practices (BMP's) specified in the Memorandum of Understanding. The Department is the first signatory to complete this BMP by auditing 22% of the top 10% accounts. Field Service Inspectors conducted the audits in a variety of businesses, ranging



from hotels, restaurants, office buildings, and laundromats. They were able to help these accounts reduce consumption by as much as 20% from their prior water usage.

A program was initiated to implement Ordinance 185-91 which required owners of all multi-family buildings to install low-flow showerheads, aerators with restrictors on all faucets, and retrofit devices in all toilets that used more than 3.5 gallons per flush.

Concentrating on conservation related activities is the City's schools, the Department released Hetch Hetchy's Water Magic Booklet for students in third through sixth grades. This booklet teaches students about water conservation and other water-related issues. The fourth annual poster contest for Water Awareness Month was successfully conducted with over 1,200 public and private school students participating in the contest.

To encourage water conservation in private developments within the City, a policy of requiring all residential units to be individually metered was instituted.

## TRAINING AND TECHNOLOGY

In order to meet a departmental objective of enhancing the role of employees through training and better technology, a varied tableau of training opportunities was offered:

- o A departmental representative participated in training concerning operation of the City's emergency response center, offered by the State's California Specialized Training Institute. This individual also participated in the development of the City-wide emergency operations plan.
- o A Coordinated Water Management Educational Program featuring tours of the City's water systems from the source through treatment, distribution, reuse, and return to the environment



was developed.

- o A high level of effort went into orienting staff at all levels to the objectives and activities of the Department. These training activities included the following:
  - Slide presentation on how the system works from Hetch Hatchy to the City
  - Presentations on the transmission system and capital projects
  - Treatment plant tours
  - Hetch Hatchy Orientation tours

New technology was introduced into the Department. An Autocad mapping system was developed for mapping of gatebooks. A study was completed for computerizations of various other record keeping functions within the water system. A program, developed under the auspices of the Watershed Master Plan, will allow for a geographic information system (GIS) to computerize information related to the Department's right-of-ways. A computerized work order system has been successfully implemented that will allow for the scheduling of right-of-way maintenance work. This system will also be modified in future years to allow for automotive maintenance, facility maintenance, payroll distribution and project and operations regulatory compliance to be incorporated into the work order process.



## HETCH HETCHY WATER AND POWER

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The Hetch Hetchy Project is a dual-purpose, multi-component hydro electric system. It was created pursuant to the Raker Act of 1913 in which the United States Congress granted the City the rights to develop the Tuolumne River source.

Hetch Hetchy usually operates as two related but separate water systems and associated power components. The primary system diverts domestic water from the Hetch Hetchy Reservoir to the San Francisco Water Department through the Kirkwood and Moccasin Power Plants. The second system diverts water from Lake Lloyd and Lake Eleanor to the Don Pedro Reservoir through the Holm Power Plant. Water impounded in the Don Pedro Reservoir satisfies the Raker Act entitlements of the Modesto and Turlock Irrigation Districts while allowing greater flexibility in use of domestic water from the Hetch Hetchy Reservoir. Recent studies demonstrate the continued importance of Cherry and Eleanor to the Bay Area's domestic supply under drought conditions.

Electric power generated at the three power plants is conveyed through approximately 165 miles of high voltage transmission lines to delivery points for the Modesto and Turlock Irrigation Districts, and through PG&E's system for transmission to San Francisco for municipal purposes.

Hetch Hetchy Water and Power is comprised of five divisions:

**General Administration:** Provides overall management of the Department, including monitoring of budgets, water and power planning, negotiating for the purchase and sale of supplemental power and managing power scheduling and billing.

**Project Operations:** Located in Moccasin, this Division is responsible for collection, storage and delivery of domestic water to the San Francisco Water Department and for the generation and transmission of electric power.

**Maintenance Engineering:** Located in Moccasin, this Division provides engineering services in support of Project Operations' maintenance activities, and acts as the engineering staff for all projects done in-house by Hetch Hetchy. Maintenance Engineering takes the lead, with Project Operations, in providing owners oversight for capital projects undertaken by UEB and its contractors.



**Bureau of Energy Conservation:** This Bureau is responsible for lowering costs by improving municipal facility energy efficiency and to promote energy efficiency in the private, commercial and housing sectors.

**Bureau of Light, Heat and Power:** This Bureau is responsible for all aspects of City street lighting and for billing the various City Agencies for electricity and purchased natural gas. The Bureau operates administratively under Hetch Hetchy Water and Power.

#### **DESCRIPTION OF THE 1993/94 WATER YEAR**

Hetch Hetchy went into water year 93/94 after a wet year. Water year 92/93 had 138% of normal runoff. Storage levels in both the Hetch Hetchy System and the Bay Area facilities ended that year at 1,594,000 acre-feet (122% of historic averages). We had not seen storage levels at this level since 1986.

Water year 1993/94 turned out to be a disappointing year. The runoff in that period was 49% of normal. Overall reservoir storage levels dropped by 330 thousand acre-feet through the year. We really did not see any months with significant precipitation.

Because of the conservative reservoir operating plans developed as a consequence of the reduction in the project's firm yield as a result of the 1987-92 drought, reservoir levels were high enough to carry us through the year without rationing. Total system storage at the end of the year was still 96% of historic averages at 1,257,000 acre-feet.

**Water Rights** Since 1987, the City and County of San Francisco has been participating in the Bay Delta water quality hearings being held by the state water Resource Control Board (Water Board). These proceedings are conducted pursuant to the water quality standard setting obligations of the Water Board pursuant to the Clean Water Act and the Porter-Cologne Water Quality Act. At this time, the Environmental Protection Agency (EPA) has issued its final rule pursuant to the Clean Water Act. The Water Board may either adopt the EPA standards or promulgate its own standards, subject to EPA approval. The Water Board has issued draft standards to become final by mid 1995.

After issuance of the standards, the Water Board will begin water rights hearings which will determine the allocated share of responsibility for meeting these standards. The water rights hearings may take three years to complete. This allocation of responsibility may impact San Francisco's water supply from the Tuolumne River if the City is required to release water from its reservoirs for Delta



water quality protection. At this time, enlisted parties are meeting to attempt to negotiate the allocation issue.

The Federal Energy Regulatory Commission (FERC) is holding hearings to determine if additional flows are needed to protect Chinook salmon in the Tuolumne River below New Don Pedro Reservoir. These proceedings have been ongoing since 1989. FERC is currently preparing a Draft Environmental Impact Statement (DEIS) for issuance in early 1995. In addition, FERC has ordered the parties to attempt to settle this matter and is currently sponsoring a mediation involving the various parties affected by the proposal to increase flows on the Tuolumne River. New Don Pedro Reservoir is owned and operated by the Modesto and Turlock Irrigation Districts. Because of San Francisco's financial participation in New Don Pedro Reservoir and its rights to exchange storage in the reservoir, San Francisco's water supply may be affected in the event an increased flow is required. It is not known at this time when FERC will reach the final decision in this case. However, if the parties are successful in the mediation and the settlement is accepted by FERC, a decision may be issued in 1995.

#### **FINANCIAL RESULTS FOR 93/94**

Hetch Hetchy's operating budget for 1993-94 at \$103M increased approximately 15% of \$13M, over 1992-93. The capital programs was budgeted at \$10.7M, \$6.1M less than the previous fiscal year. Revenues to support the Department's total expenditures included \$74M from the sale of power, \$14.5M from the sale of water, \$10.3M from the unappropriated fund balance and \$2.9M from interest and miscellaneous revenues.

Hetch Hetchy's budget included a couple of organization changes which had no net financial impact on the department: the transfer of the Transit Power Division to the Municipal Railway and the transfer of the Bureau of Energy Conservation from the PUC Bureaus. Hetch Hetchy had previously provided all the funding for the Bureau of Energy Conservation and continued to support the Transit Power Division via a fund transfer to Muni. The major funding issues were the purchase of power at \$27M, an increase of \$4M over the original estimate. In addition, the contribution to the General Fund was increased over the prior fiscal year by \$5M to a total of \$30M.

Revenues from the sale of power \$4.0M higher than the original estimate due to the Department's pro-active role in the sale and purchase of power through the Western System Power Pool. However, the Department did have to purchase additional power because of a very dry year which delayed power generation. Capital projects (\$4.0M) were deobligated to provide funding for the supplemental



power.

The Department's capital program of \$10.7M included projects to protect the infrastructure, comply with health and safety issues, and to assure the availability, conveyance and storage of water, as well as power generation.

The revised power revenues and the deobligation of capital projects provided the necessary funding for the Department to meet its 1993-94 obligations.

#### **GENERAL ADMINISTRATION ACHIEVEMENTS**

In fiscal year 93/94, the Water and Power Resources staff (W&P) developed a large number of innovative power sale and purchase agreements to mitigate the financial impacts of one of the driest years in the Hetch Hatchy records. One of their more innovative ideas was a power storage agreement with British Columbia Power Exchange Corporation (Powerex) and Bonneville Power Administration that allowed Hetch Hatchy to send power north to Canada during the spring runoff when the wholesale market is glutted with cheap power. In the summer and fall when we were buying power, our deposits in the BC hydro system were returned at a new cost well below the then current prices in California. This single strategy saved the City in excess of one million dollars.

In response to the continuing dry year, W&P ramped up the use of the wholesale spot power market to almost totally replace our higher cost long term supplemental power purchases with cheaper spot market purchases. It is estimated that the actions of W&P staff saved Hetch Hatchy over ten million dollars in the costs for supplemental power in FY 93/94 when compared to FY 92/93 operating strategies.

W&P led a team of City staff, consultants and PG&E employees in the development of a comprehensive overhaul of the wholesale billing methodology that will save both organizations hundreds of thousands of dollars a year in processing costs and error resolution activities.

#### **PROJECT OPERATIONS/MAINTENANCE ENGINEERING ACHIEVEMENTS**

##### **PROGRAMS**

###### **Preventative Maintenance/ Upgrade Program**

Hetch Hatchy has developed an extensive preventative maintenance and upgrade program designed to maximize utility of operating



equipment and prevent breakdown. Under this program turbine wheels have been heat treated and rehabilitated, electronic governors have been extensively rehabilitated and restored to maximum utility, speed switches of new design have been installed making it possible for operators to more closely monitor and control the operations of turbines/generators. Bently Nevada vibration control mechanisms have been installed to monitor the effects of vibration on the equipment and to provide for automatic alarm and shutdown if needed. New solid state electronic excitation equipment has replaced old mechanical equipment resulting in more reliable and responsive operations. In addition, countless other smaller preventative and upgrade projects have been completed to enhance the reliability and utility of component operation.

#### **Archives**

Due to its age and the fact that much of the Hetch Hetchy system remains largely unaltered from its original design and operational methodology and due also to the fact that much of Hetch Hetchy's legal position rests on documents which are now over as eighty years old, a concerted effort has been made to collect and archive Hetch Hetchy drawings and documents. These archives are housed largely in the new archive building at Moccasin. During 1993/94 the archives building was completely organized, a new Versatile Document Indexing and Recovery system was implemented which reduces search time from hours or even days to minutes and 800 banker boxes of drawings were entered in the Archives system. Hetchy Engineering, Operations and the City Attorney's office are utilizing the system extensively in their daily work.

#### **Studies Unit Upgrade Report**

The Unit Upgrade Report is the result of a general study of the power production capacity of Hetch Hetchy. This study analyzes the relationship of component parts of the entire power production



facility, identifies the bottlenecks to increased power production (such as components that are undersized in relation to other components) and makes extensive recommendations for engineering and operational improvements which will lead to increased power production. Many of these improvements are shown to have a cost pay back on investment in as little as six months to one year. The results of the Unit Upgrade Report are the primary source of power related capital projects to be funded in 1994/95.

In FY 93/94, we added 25 MW of capacity to the capability of our existing units for an average cost of less than \$100/kW. This compares to an average cost of \$1,000/kW for new construction.

## Projects

### **Moccasin Reservoir Flashboards**

In order to maximize the storage capacity of the Moccasin Reservoir and increase the flexibility of power generation at the Moccasin Powerhouse, flashboards were added to the top of the spillway. The flashboards are approximately 18 inches in height and are mounted on permanent metal upright frames. The flashboards add approximately 55 acre feet of water storage capacity at Moccasin Reservoir when they are installed.

### **Upgrade Thermal and Hydraulics at Moccasin and Holm**

Consistent with the Unit Upgrade Study results projects have been completed which have the result of increasing the thermal performance of transformers at Holm and Moccasin Power Houses. The thermal performance being the limiting factor in the overall capacity of the units to generate power.

### **Re-Lining Pipeline #2 From the Stanislaus River to Cashman Creek**

In pursuit of Hetch Hetchy general plan to maintain the pipelines of the Aqueduct between the water source and the City pipeline number two was relined with concrete mortar from the



**Priest Reservoir Diversion  
Channel**

Stanislaus River to Cashman Creek. This relining is required to repair sections where the existing lining is damaged or worn. Relining keeps the steel pipe from corroding.

**Asbestos Remediation at  
Several Locations**

To stop the inflow of local run-off into Priest Reservoir, a channel was built which will divert run-off upstream from the reservoir and from the local watershed above the reservoir into Rattlesnake Creek below Priest Dam. This project minimizes potential increases in turbidity due to local storms and protects the quality of Hetch Hetchy water.

Consistent with Hetch Hetchy policy of remediating health hazards to the public or to its employees, an asbestos survey of all Hetch Hetchy buildings was completed and asbestos was removed from several facilities during 1993/94. The facilities included: Cherry Valley Compound (several buildings), Old Moccasin Powerhouse Basement, Moccasin Administration Building (Boiler removal), Moccasin Powerhouse cooling water system, and Moccasin Cottage #45.



## BUREAU OF ENERGY CONSERVATION

On July 1, 1993 the Bureau of Energy Conservation was placed under Hetch Hetchy's direct organization. The Bureau's mission is to reduce energy use in city facilities and to promote energy efficiency in the private, commercial and housing sectors. The Bureau operates a number of different programs addressing energy use in City government facilities. Most of them seek to not only save energy through increased efficiency, but also to save money through reducing the operations and maintenance demands on staff, and to improve working conditions through better lighting and heating. The Bureau provides energy management programs and services to all departments of the City. Recent highlights include:

- o Performed numerous lighting retrofits totalling over \$600,000 in lifetime energy savings in addition to lowering departmental maintenance costs.
- o Performed boiler tune-ups and retrofits in numerous facilities totalling over \$600,000 in lifetime energy savings.
- o Shifted pumping at the Water Department's Central Pumps and Lake Merced Pump stations to off peak periods to achieve savings in annual peak demand charges.
- o Identified projects at City College and several MUNI stations including a joint project with BART at the Embarcadero Station.
- o Recommended energy efficiency improvements to the design of new construction renovation of 20 facilities including 13 fire stations, the Civic Center Courthouse and the Department of Public Health Headquarters.
- o Provided workshops on efficient lighting design for City architects, electrical engineers, and departmental maintenance staff.
- o Developed strategies to promote energy efficient decision makings throughout the life of City buildings. Initiated several pilot projects: bond guidelines, building commissioning, efficient motors, and coordination with DPW's Facility Condition Monitoring Program.
- o Developed an Energy Element to the City's Emergency Operations Plan which included developing a response plan to energy shortages and centralizing information on vehicle fuel use by all City departments.



- o Initiated an assessment of the total demand side management potential yet to be captured in all City facilities.

#### BUREAU OF LIGHT, HEAT AND POWER

In 1993/94, the Bureau achievements included:

- o Continued the conversion of City-owned street lights to high pressure sodium vapor (HPSV). (24 lights)
- o Completion of the street lighting design for cobra type street lights for the Dolores Heights undergrounding district (106 street lights). This project will use HPSV lights to improve illumination and conserve energy. Construction work will be funded by the residents through an underground assessment district.
- o In response to problems identified by citizens groups, law enforcement agencies and others, the Bureau increased general lighting levels in areas throughout the City. Major projects included: Percita Park - 18 lights, Civic Center Plaza - 20 lights, Leavenworth -McAllister to Geary - 23 lights, Tenderloin Area - 138 lights
- o Removed a total of 18 abandoned concrete street light poles from 19th Avenue between Eucalyptus Drive and Junipera Serra Boulevard and Junipera Serra Boulevard between 19th Avenue and the County line.
- o Improved response time from 61% (total of 2736) in FY 92/93 to 68% (3991) in FY 93/94 within the first 24 hours to repair street light outages.
- o Reduced PG&E cost of emergency work of City-owned poles by having DET personnel perform the emergency work. The average cost of PG&E emergency work from July 18, 1992 to March 6, 1993 was \$1,095. The current average cost of DET emergency work is \$600.
- o Less City-owned street light outages reported by citizens due to outages reported by DET night detail personnel
- o Quicker response time to re-install poles due to pole knockdowns and repair conduit damages. The response time was 16 days in FY 1992/93 in comparison to 5 days in FY 1993/94.



## PUC BUREAUS

The Public Utilities Commission's three departments, Municipal Railway, Hetch Hetchy Water and Power and the Water Department, receive administrative and technical support from five service bureaus. This approach eliminates duplication of effort and contributes to more efficient operations.

### UTILITIES ENGINEERING BUREAU (UEB)

The Utilities Engineering Bureau (UEB) is responsible for project management, design engineering, construction monitoring and contract administration for the capital improvement program of the Public Utilities Commission. During the reporting period, UEB performed 95 projects whose total value exceeded \$900 million. Major accomplishments included:

- o Completion of the Priest Diversion Channel, a \$1.8 million project to improve the water quality in Priest Reservoir by diverting Rattlesnake Creek flow downstream.
- o Relining of San Joaquin Pipeline No. 2, a \$2.1 million project in the San Joaquin Valley.
- o Construction of the second expansion of 180 mgd of the Harry W. Tracy (formerly San Andreas) Water Treatment Plant, a \$46.4 million project that included provision of ozonation disinfection facilities.
- o Replacement of the five mile, 44-inch diameter Calaveras Pipeline in the Sunol Valley at a cost of \$21 million.
- o Construction of \$7.9 million in improvements to Sunol Water Treatment Plant.
- o Notice to proceed and groundbreaking for construction of the Muni Metro Turnback, a \$140 million project to extend the subway system from the foot of Market Street south along the Embarcadero to King Street.
- o Construction of the \$19.5 million new trackway to extend the F-Embarcadero light rail line from Upper Market Street at Castro to Duboce.
- o Design of the \$34.7 million Advanced Train Control System for the Muni Metro subway.



## BUREAU OF FINANCE

The Bureau of Finance provides financial management, payroll, accounting, revenue collection services, and claims processing for all PUC departments and bureaus. Accomplishments for 1993-94 include:

- o Collected \$1 million in transit impact development fees bringing the total to over \$82 million to apply to Muni's critical maintenance needs and the expansion of peak service to downtown San Francisco.
- o Developed and managed all the financial data to support the implementation of Proposition M. Refer to Muni's section for details.
- o Implemented Muni's new passes sales pilot program. Refer to Muni's section for details.

## BUREAU OF MANAGEMENT INFORMATION SYSTEMS

The Bureau of Management Information Systems (BMIS) provides data processing, computer systems development and office automation services to all departments and bureaus of the Public Utilities Commission.

This Bureau maintains and improves the computer systems that process water billing data for the Water Department, vehicle maintenance data for Muni, and payroll and other financial data for all PUC organizations.

BMIS operates a central computer center on a 24 hour/day, 7 day/week basis. In addition, the Bureau supports hundreds of micro computers that are installed at all PUC locations.

The data center places much emphasis on internal procedures that maximize efficiency and reliability. This is evidenced by the following achievements:

- o The PUC computer network of more than 300 terminals was operational better than 99% of available time.
- o Computer generated reports were delivered on-time more than 98% of the time.
- o The number of network related trouble calls was reduced to an average of less than 5 per day.



The use of micro computers was greatly expanded during this fiscal year. Several hundred micro computers were installed to support office automation and other administrative activities.

The computer network was significantly enhanced by implementing data communication facilities that allow electronic access and exchange of information from micro computers at many PUC sites.

#### **BUREAU OF PERSONNEL AND TRAINING**

The Bureau of Personnel and Training is the liaison with the Department of Human Resources and the Civil Service Commission, and provides human resource services in recruitment, classification, position control, labor relations, Equal Employment Opportunity and general personnel administration. Key activities include:

- o Develop and implement comprehensive first-line supervisory training program.
- o Develop PUC policy and procedures to implement federally mandated Americans With Disabilities Act.
- o Update and publish PUC Affirmative Action Plan reflecting post Proposition E workforce composition.
- o Develop and implement PUC wide workplace violence training.
- o Develop examinations and post eligible lists for high priority PUC positions.



## **FINANCIAL STATEMENTS**



**San Francisco Water Department  
and  
Hetch Hetchy Project  
(A Component of the City and County of San Francisco)  
Combined Balance Sheets  
June 30, 1994 and 1993  
(in thousands)**

<b>ASSETS</b>	<b>1994</b>	<b>1993</b>
<b>UTILITY PLANT</b>		
Water	\$ 661,387	\$ 630,067
Power	197,041	195,142
Joint water and power	141,947	138,366
Construction in progress	<u>24,192</u>	<u>32,744</u>
Total utility plant	1,024,567	996,319
Less accumulated depreciation and amortization	(381,067)	(356,626)
Net utility plant	643,500	639,693
<b>RESTRICTED ASSETS</b>		
Equity in deposits and investments of the City Treasurer	30,638	43,663
Deposits in escrow	1,097	999
Investments held by trustee	108,688	109,077
Interest receivable	<u>1,439</u>	<u>1,554</u>
Total restricted assets	141,862	155,293
<b>CURRENT ASSETS:</b>		
Cash	<u>118</u>	<u>118</u>
Equity in deposits and investments of the City Treasurer	<u>71,114</u>	<u>85,764</u>
Receivables:		
Water and power (net of allowance for doubtful accounts of \$143 in 1994 and 1993)	15,595	15,531
Suburban water rate agreement	2,320	
Interest and other	1,504	1,903
Receivables from the City	<u>7,041</u>	
Total receivables	19,419	24,475
Materials and supplies-at average cost	4,138	4,412
Total current assets	94,789	114,769
<b>TOTAL ASSETS</b>	<b>\$ 880,151</b>	<b>\$ 909,755</b>

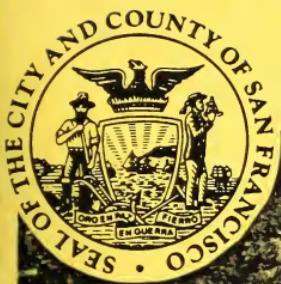


<b>EQUITY AND LIABILITIES</b>	<b>1994</b>	<b>1993</b>
<b>EQUITY:</b>		
Contributed capital	\$ 44,207	\$ 45,387
Retained earnings	515,606	525,796
Total equity	559,813	571,183
<b>LONG-TERM DEBT</b>		
General obligation bonds	5,790	7,455
Revenue bonds	272,764	275,609
Total long-term debt	278,554	283,064
<b>OTHER LONG-TERM LIABILITIES:</b>		
Accrued vacation, sick leave, and workers' compensation	7,193	6,564
Damage and claims liability	3,291	3,291
Capital leases payable		74
Contract retention in escrow (payable from restricted assets)	1,097	999
Revenue bonds interest (payable from restricted assets)	2,886	2,934
Total other long-term liabilities	14,467	13,862
<b>CURRENT LIABILITIES:</b>		
General obligation bonds	1,665	1,270
Revenue bonds	5,115	4,820
Accounts payable	9,680	14,085
Accrued payroll	1,762	1,703
Accrued vacation, sick leave, and workers' compensation	3,527	3,487
Bond interest payable	89	62
Retention due contractors	987	885
Payables to the City		7,912
Suburban water rate agreement		2,797
Damage and claims liability	2,750	2,750
Deposits and construction advances	1,517	1,264
Capital leases payable	74	397
Other	151	214
Total current liabilities	27,317	41,646
<b>TOTAL LIABILITIES</b>	<u>320,338</u>	<u>338,572</u>
<b>TOTAL EQUITY AND LIABILITIES</b>	<u>\$ 880,151</u>	<u>\$ 909,755</u>









PUBLIC UTILITIES COMMISSION  
Annual Report FY 1994-95  
City and County of San Francisco



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City and County of San Francisco

Annual Report

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City and County of San Francisco

## PUBLIC UTILITIES COMMISSION

1155 Market Street  
San Francisco, CA 94103  
(415) 554-3160

November 17, 1996

The Honorable Public Utilities Commission  
City and County of San Francisco  
1155 Market Street  
San Francisco, CA 94103

Dear Members,

In accordance with Sections 3.600 and 3.501 of the 1932 Charter, this annual report for Fiscal Year 1994-95 is hereby submitted.

Each of the PUC departments and bureaus have summarized their principal activities of 1994-95. The following are some of my thoughts.

This was the first year without responsibility for the Municipal Railway. It was a year of self assessment. In general, we are in the process of becoming a much more focussed, water and power organization. This is to the point where there is some thought that another name might be more appropriate to our new function.

In the middle of our self assessment came a series of water treatment upsets in March, 1995. These posed no health risk to our customers, but served as a powerful wake up call. In the course of examining the failures, we became acutely aware of weaknesses in our operating organization which have become the object of a great deal of corrective action. This has lead to organizational changes and a significant upgrading of our financial commitment to operating and water quality issues.



Also in the spring of 1995 we reached agreement with the Modesto and Turlock Irrigation Districts and ten other governmental and environmental agencies on the amount and allocation of flows for the lower Tuolumne River. These agreements have since been approved by the Federal Energy Regulatory Commission. They provide for increased flows, improved physical conditions, more biological studies, and funds for riparian and recreational improvements. The flows will be provided by the Irrigation Districts and we will compensate them \$3.5 million per year for doing so. This brings to an end what had been a long and contentious dispute between San Francisco and the Irrigation Districts. We believe that it will prove to be a solid foundation for future cooperative efforts.

Respectfully submitted,

*ABM -*

Anson B. Moran, General Manager



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## **FINANCIAL STATEMENTS**



## WATER DEPARTMENT

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The San Francisco Water Department serves a population of 2.3 million people, providing water to residential, commercial, industrial, governmental and wholesale customers in the San Francisco Bay region. In Fiscal Year 1994-95 the Department delivered 86,456 acre feet of water to its 166,000 retail customers in and adjacent to the City and 164,227 acre feet to its 30 wholesale customers in San Mateo, Santa Clara and Alameda counties.

"to provide all customers a safe and potable water supply in adequate quantities, to respond to emergency situations, to equitably charge and collect for water service, to provide for the needs of the present and future through continuous maintenance, planning and improvements, and conduct all departmental operations efficiently and at a reasonable cost."

### WATER QUALITY

In March, the Department experienced treatment failures at the Sunol Valley Water Treatment Plant. On March 13, 1995 the Sunol plant unsuccessfully treated high turbidity Hetch Hetchy water resulting in the delivery of water to consumers that exceeded the turbidity standards for drinking water. On March 20, 1995 the Sunol plant experienced difficulties again, this time in treating a blend of Calaveras Reservoir and Hetch Hetchy waters.

In immediate response to these incidents, the Public Utilities Commission authorized a review of the incident by a team of outside experts. Subsequently, the California Department of Health Services ordered such an evaluation, as well. The external evaluation will be completed in August, 1995. It will document a variety of problems and recommended actions for improvement.

The PUC began implementing changes in response to the expected recommendations during the fiscal year and will be instituting many more in FY 1995-96.

Filtration Avoidance - Activities were conducted that continued to maintain the Environmental Protection Agency (EPA) and California Department of Health Services (DHS) granted "filtration avoidance" status for



the Hetch Hetchy Aqueduct. A complete **Watershed Sanitary Survey** was performed in the Hetch Hetchy watershed. Water treatment studies and operations were successfully conducted using the new SFWD mobile pilot plant. Over 5,500 separate microbiological and chemical analyses were completed and reported in monthly filtration avoidance reports to DHS and EPA, that verified the continuing exceptional quality of the water supply.

**Cross Connection Control** - The program to prevent contamination of the drinking water in San Francisco with unsanitary sources, continued with the testing of 4,777 backflow prevention devices and the inspection of 330 new installations. Additionally, 220 consumer water quality complaints were responded to within the targeted one day response time.

**Laboratory** - Over 125,000 separate analytical tests were performed on source and treated waters, that assured compliance with all applicable water quality regulations throughout the SFWD service area. A new computerized **Laboratory Information Management System** was brought on line that greatly streamlined data storage, retrieval, and reporting. A consultant process to evaluate and write new laboratory Quality Assurance and Standard Operating Procedures was initiated.

**Engineering** - The SFWD Water Supply Permit Application was completed and submitted to CA DHS following a several year process, the first renewal and rewrite since the 1960's. Fourteen transmission pipeline disinfection and/or dechlorination projects were completed, totaling 82 miles of pipelines, assuring that safe drinking water was provided following each pipeline repair and that applicable health and environmental regulations were met. Overall system water quality was assured by conducting engineering studies for both large and small systems, and providing water treatment oversight.

## WATER SUPPLY

During FY 1994-95, Operations Engineering inspected and maintained approximately 8.5 miles of transmission



mains. Also inspected was the 26.5 mile long Coast Range Tunnel. All inspections were documented in detail for future scheduling of inspection and repair work.

Operations Engineering also supervised the relocation and reconstruction of major water transmission facilities at the site of the new Oyster Point Freeway Interchange in South San Francisco. This work involved resolving many unexpected and complex engineering problems during construction.

September - 1994

Drain and inspect Crystal Springs #3 from valve L30 to L41K. From Bellevue and Pepper in Burlingame to St. Dunstan's Church in Millbrae.

Repair leak of 10" Water main in Millbrae beneath Railroad track North of Millbrae Avenue.

February - 1995

Inspected Coast Range Tunnel.

Installed expansion joints on BDPL #3 and #4 bordering Highway 680 near Calavaras Fault.

Rerouted Palo Alto Pipeline at 5th and Glendale for Railroad underpass, installed new 36" gate valve and air valve (F45).

## IMPROVEMENTS

Tesla Portal - New sample lines installed to increase responsiveness of residual paced chlorination. New NaOCl piping and feed pumps.

Sunol Valley Water Treatment Plant - Raw water flash mix chemical feed pump installed. Gravity feed NaOCl lines installed at headworks and clear well for emergency chlorination.

Millbrae - Installed permanent emergency NaOCl injection points on Crystal Springs #2 and Sunset Supply pipelines.

Polhemus - Installed temporary NaOCl feed.



Harry Tracy Water Treatment Plant - Modified ozone sample lines at contactors to shorten distance to analyzers. Stand-by NaOCl feed line installed parallel to original feed line. Ambient ozone monitoring equipment installed for operators safety. Installed strainers on ozone sample lines.

## **WATERSHED PROTECTION AND MANAGEMENT**

Completed Phase IV of the Watershed Management Plan and presented Preferred Alternative for Watershed Policy and Management Plan for adoption by the PUC. The PUC adopted a modified version of the Preferred Alternative in January, 1995.

Completed the Alameda Creek Water Resources Study, presented findings to the PUC, who accepted the report and directed that results be incorporated into a Sunol Valley Resources Management Element of the Watershed Management, which was initiated in June, 1995.

Installed Watershed Geographic Information System (GIS) at Millbrae and began utilization of watershed database included in the system by the EDAW consultant team for other analytical work.

## **MAINTENANCE AND OPERATIONS**

During the course of the fiscal year, the following major operations and maintenance activities occurred in the City: 5.0 miles of distribution mains were replaced; coordination of main replacement and sewer and services replacement in Grant Avenue was done together with DPW, PG&E, DPT and other agencies; a new 1.5 mile section of 36-inch steel main was completed; the service renewal program continued during the year, replacing approximately 1,040 services; 90 main breaks were repaired and water service restored; two in-City reservoirs, Stanford Heights and the north basin of Sunset Reservoir were drained, inspected and cleaned; main flushing to improve water quality was done on an



on-going basis in the City; maintenance on over 500 trucks, cars, diesel engines and assorted equipment was performed.

## ENVIRONMENTAL

Lake Merced - SFWD continued its program of replenishment of Lake Merced lake levels during the fiscal year. This involved introducing five million gallons of water per day into the lake, installing and operating dechlorinating system, staging the water deliveries around the nesting patterns of local bird populations and raising the lake level on a temporary basis by two feet, once in the late winter and again in the early summer.

## WATER CONSERVATION

The Conservation Section successfully implemented a conservation retrofit program that had 140,000 customers (90% of SFWD's retail customers) installing low-flow showerheads, aerators with restrictors on all faucets and retrofit items in all toilets.

The Department's first toilet rebate program was offered in January, 1995. Offering 8,000 rebates of \$37.50 per toilet, the rebate program was sold out within ten days. The program required all participants to recycle their discarded toilets with an approved vendor which in turn crushed and used the material for road base.

Free conservation audits to the top 20% of all multi-family accounts were offered; 666 multi-family audits were audited. This program is a Best Management Practice (BMP) specified in the Memorandum of Understanding Regarding Urban Water Conservation.

A study was completed during FY 94-95 on the saving resulting from SFWD's commercial conservation audit program. The study followed up on audits conducted during FY 93-94 and compared consumption after a year's time. The study found that those accounts that passed the audit, reduced their water consumption during



the first six months in 1995 in comparison to their water usage for the same period in 1994.

Several components were added to SFWD's school education program: a teachers' guide to Hetch Hetchy's Water Magic was created in-house; a 36" by 24" map of the City's distribution system was illustrated by Phil Frank, a cartoonist for the San Francisco Chronicle; the fifth annual calendar contest for students in grades four through six was held, with over 1,500 entries.

## TRAINING AND TECHNOLOGY

Meter reading routes were redesigned, effectively reducing the total number of routes by 50 and the number of meter reading positions by two. A household shut-off valve identification program was instituted as part of the Department's outreach in the area of emergency preparedness. A meter changeout and tracking system was developed and implemented to enhance water and sewer service charge revenues.

## WATER SUPPLY AND TREATMENT

### Engineering Projects

#### GIS (Geographic Information System)

The Division completed a GIS demonstration project for six miles of the 138 miles of Rights of Way (ROW). This computerized system demonstrated the accumulation of diverse information in the centralized location of a spatial and textual database software for easier recording and retrieval, potentially reducing the number of hours currently spent in these activities. The demonstration proved the usefulness occurring in the ROW. The Division will be implementing the GIS on the remainder of the 138 miles of ROW.

Activities which were shown to be effectively and efficiently served by the GIS included the following:

Surveying - All survey work can be immediately recorded onto



the GIS and available for reference by all users.

**Pipelines and Appurtenances Characteristics and Documentation**  
- All data on these facilities can be attached onto the spatial representation of the pipelines and instantly made available to operations, engineering, or other staff for its operations, maintenance, and design activities in the ROW.

**Encroachments Identification and Removal** - Reports on encroachments can be recorded and the resolution process monitored.

**Deeds, Permits and Leases** - Numerous files which have had to be collected from four different locations can be accumulated into the GIS for quick access.

**Corrosion Control** - Periodic measurements required to be monitored can be collected and evaluated.

**Pipeline Inspection Results** - Damage descriptions with locations, including pictorial and video tape records, can be recorded in the GIS for tracking of follow-up repair work.

#### Corrosion Control

Two challenging situations of corrosion which severely damaged the SA3 and Sunset Supply Pipelines were investigated and successfully resolved. In the process, the Division has developed an in-house staff capable of conducting the business of determining cathodic protection (CP) requirements of its pipelines, effectively monitoring its pipelines for proper levels of CP, and maintaining/repairing CP equipment. The corrosion control team has also established policies and procedures in pipeline coatings and conducted training for the Division plumbers in the proper selection and application of these coatings. An orientation presentation on corrosion control was also prepared and presented to the operations staff and management to bring attention to the need for proper design and repair practices to prevent the potentially costly consequences of corrosion.

#### SFWD-Santa Clara Valley Water District Intertie

The conceptual engineering report for the project which will



allow for the transport of up to 40 mgd between the two water supply jurisdictions was essentially completed. This facility would allow for either jurisdiction to call upon the supply of the other in the event of an emergency or a planned maintenance activity. The environmental review of the proposed project, as well as the agreement for the operations of the facilities, were initiated.

#### Chevron Pipeline Spill Mitigation Review

The engineering review of the proposed projects to mitigate a spill from the potential rupture of the Chevron pipeline which traverses the watershed above San Antonio Reservoir and lies along Alameda Creek continued during the fiscal Year without resolution. The importance of the reservoir during an emergency, the inability of available treatment facilities to remove spilled hydrocarbon products from the water supply, and the presence of earthquake faults along the route of the gasoline products pipeline make this an especially challenging problem for both the PUC and Chevron.



## HETCH HETCHY WATER AND POWER

The Hetch Hetchy Project is a dual-purpose, multi-component hydroelectric system. It was created pursuant to the Raker Act of 1913 in which the United States Congress granted the City the rights of way needed to develop the Tuolumne River source. The primary purpose of the project is to provide a water supply to 2.3 million bay area residents. A byproduct of the water supply operation is the generation of clean, renewable, hydroelectric power. This power is used for the benefit of the citizens of San Francisco and may not be sold to an investor owned utility.

One of the results of the recently ended drought was the development of a "water first operational policy". In summary the policy requires that water not be lost from the City's control until it can be demonstrated that the City can recover an equivalent amount from future run off or an alternative source. This results in an operational pattern where in the period after the seasonal runoff ends about July 1, power generation is limited to that associated with water deliveries to the City and the City meets much of its power supply obligations through the purchase of power on the wholesale market. This strategy yields the maximum possible reservoir levels at the beginning of the new water year. Typically this results in a considerable quantity of excess power generation from the time of the first significant snow or rain fall in the winter to the end of the runoff (e.g. January to July 1). Power in excess of our needs is sold on the whole sale market.

Hetch Hetchy operates as two related but separate water systems and associated power components. The primary system diverts domestic water from the Hetch Hetchy Reservoir to the San Francisco Water Department through the Kirkwood and Moccasin Power Plants. The second system diverts water from Lake Lloyd and Lake Eleanor to the Don Pedro Reservoir through the Holm Power Plant. Water impounded in the Don Pedro Reservoir satisfies the Raker Act entitlements of the Modesto and Turlock Irrigation Districts while allowing greater flexibility in use of domestic water from the Hetch Hetchy Reservoir.

Electric power generated at the three power plants is conveyed through approximately 165 miles of high voltage transmission lines to delivery points for the Modesto and Turlock Irrigation Districts, and through PG&E's system for transmission to San Francisco for municipal purposes.

Hetch Hetchy Water and Power is comprised of six divisions:



**Administration:** Provides overall management of the Department, including monitoring of budgets, water and power planning, negotiating for the purchase and sale of power and managing power scheduling and billing.

**Project Operations:** Located in Moccasin, this Division is responsible for collection, storage and delivery of domestic water to the San Francisco Water Department and for the generation and transmission of electric power.

**Maintenance Engineering:** Located in Moccasin, this Division provides engineering services in support of Project Operations' maintenance activities, and acts as the engineering staff for all projects done in house by Hetch Hetchy. Maintenance Engineering takes the lead, with Project Operations, in providing owners oversight for capital projects undertaken by UEB and its contractors.

**Bureau of Energy Conservation:** This Bureau is responsible for lowering costs by improving municipal facility energy efficiency and to promote energy efficiency in the private, commercial and housing sectors.

**Bureau of Light, Heat and Power:** This Bureau is responsible for all aspects of City street lighting and for billing the various City Agencies for electricity and purchased natural gas. The Bureau operates administratively under Hetch Hetchy Water and Power.

**PUC Health and Safety.** This Section provides PUC technical support on health and safety issues, develops programs to reduce workplace injuries/illnesses and develops health and safety training programs. This section operates administratively under Hetch Hetchy Water and Power.

## **DESCRIPTION OF THE 1994/95 WATER YEAR**

Hetch Hetchy went into water year 94/95 after a below average year. Water year 93/94 had only 46% of normal runoff. Storage levels in both the Hetch Hetchy System and the Bay Area facilities ended that year at 1,114,000 acre-feet (76% of historic averages).

Water year 1994/95 turned out to be the second wettest year on record. The runoff in that period was 217% of normal. Overall reservoir storage levels reached its maximum capacity through the year.



Because of the conservative reservoir operating plans developed as a consequence of the reduction of the project's firm yield as a result of the 1987-92 drought, reservoir levels were high enough to carry us through the year without rationing. Total system storage at the end of the year was 123% of historic averages at 1,807,000 acre-feet.

## **WATER RIGHTS**

Since 1987, The City and County of San Francisco has been participating in the Bay-Delta water quality hearings being held by the State Water Resources Control Board (Water Board). These proceedings are conducted pursuant to the water quality standard setting obligations of the Water Board pursuant to the Clean Water Act and the Porter-Cologne Water Quality Act. In May 1995, the State Board issued its final order and promulgated a Water Quality Control Plan..

In order to implement the Water Quality Control Plan, the Water Board must allocate responsibility for meeting the Standards set forth in the Plan. Presently the State Water Project and Central Valley Project are responsible for meeting the standards in their entirety. At a minimum, the State Board must consider whether additional parties should be required to take actions to assist in meeting the standards in the Water Quality Control Plan. If the Board determines that additional water users must participate in meeting requirements for additional flow and water quality protection in the Bay-Delta system, it is uncertain to what degree that obligation will extend. It is possible that the State Board may seek to impose an obligation on San Francisco.

At the present time there are negotiations on-going among San Joaquin River basin and Sacramento River basin interests to try to resolve the allocation issue without the need for an adjudicatory decision by the State Board. It is uncertain whether or not these negotiations will be successful. If not, it is expected that the State Board will begin its formal water rights proceedings in the fall of 1996.

The Federal Energy Regulatory Commission (FERC) is holding hearings to determine if additional flows are needed to protect Chinook salmon in the Tuolumne River below New Don Pedro Reservoir. These proceedings began in 1989. In 1995, the parties to this proceeding reached an agreement to increase flows. Pursuant to a side agreement between San Francisco, the Modesto Irrigation District and the Turlock Irrigation District, if the proposed settlement agreement is accepted without substantial alteration by FERC, then the Districts will meet the flow requirements below New Don Pedro in



exchange for payments by San Francisco. The United States Fish and Wildlife Service has issued a "no jeopardy" opinion pursuant to Section 7 of the Endangered Species Act and the parties to the proceeding are awaiting final environmental review of the settlement agreement by FERC. Upon finalization of the environmental documentation, the settlement agreement and related documents will be forwarded to FERC for formal approval. If accepted by FERC, the parties to the settlement agreement will be bound by the terms of the settlement agreement and, to the extent FERC has jurisdiction, by the FERC order on the license for New Don Pedro Reservoir. Other obligations are contained in the settlement agreement and referenced side agreement between San Francisco and the Districts.

## **FINANCIAL RESULTS FOR 94/95**

Hetch Hetchy's operating budget for 1994-95 at \$96.5M decreased approximately 7%, or \$6.6M, over 1993-94. The capital program was budgeted at \$10.7M, the same as the previous fiscal year. Revenues to support the Department's total expenditures included: \$76.1M from the sale of power, \$17.4M from the sale of water, \$.2M from the unappropriated fund balance and \$2.9M from interest and miscellaneous revenues.

Hetchy's budget included a organizational change which had no financial impact on the department: the transfer of the PUC Health and Safety Unit.



## ADMINISTRATION ACHIEVEMENTS

During fiscal year 94/95, HHWP staff continued development and implementation of new power marketing strategies to increase revenues from power sales and decrease purchased power costs. The strategies employed included the following, some of which yield benefits in the subsequent fiscal year:

- Extended agreements which allowed HHWP to "store" excess power generated during the spring runoff season when wholesale prices are depressed for return to HHWP during summer and fall when power prices typically peak. Estimated contribution to net revenues during FY 95/96 is \$1.5 million.
- Secure summer and fall power supplies at prices lower than prior years. Estimated savings during FY 95/96 prior year wholesale power costs for the same period is \$0.5 million.
- Sell wholesale power in weekly and monthly committed blocks at prices slightly higher than daily spot market. Estimated contribution to net revenues during FY 94/95 is \$0.5 million.

In addition, HHWP staff concluded terms of several rate adjustments to the long-term City/PG&E Agreement which have significant financial benefits for both current and future years:

- Supplemental Power Purchases. Supplemental Demand support under the long-term City/PG&E Agreement is being changed from the traditional cost-based approach to market rates, resulting in savings \$1.2 million during FY 94/95 and \$5.0 million annually commencing FY 95/96.
- Transmission & Distribution Costs. Transmission and distribution rates were recalculated to reflect current HHWP loads and PG&E system costs. The resultant rate decrease will save the City approximately \$1.0 million per year commencing FY 95/96.
- Ancillary Services Costs. Both the capacity reserve requirement and the capacity reserve rate were reduced, resulting in annual savings of \$2.5 million commencing FY 95/96.

The combined financial impact of the rate adjustments to the long-term City/PG&E Agreement is an increase to net revenues of \$1.2 million during



FY 94/95 and \$8.5 million per year thereafter.

Much of this net revenue improvement will be used to mitigate the costs associated with the "water first operational policy".



## PROJECT OPERATIONS/MAINTENANCE ENGINEERING ACHIEVEMENTS

### **Preventive Maintenance/ Upgrade Program**

During 1994/95 Hetch Hetchy continued to focus on the general maintenance and upgrading of its basic equipment and facilities.

New battery chargers were installed on the emergency battery systems at Holm and Moccasin Powerhouses. This will improve the reliability of the power backup systems at these locations in the event of short term power outages.

Variable speed drives were installed on the pumping system which moves water from Eleanor Reservoir to Cherry Reservoir. This new equipment will significantly improve the means of moving water from Eleanor which is small compared to the size of its watershed to Cherry which is capable of storing more water than it's watershed typically produces. This improvement significantly increases both the water storage potential of the system and, by improving the system's ability to store water for power generation till power prices are higher the value of the power produced. An additional improvement which further enhances the use of the Cherry/Eleanor watershed was the installation of flow meter in the connecting tunnel. Flow meters, wherever they are installed in the system, increase Hetch Hetchy knowledge of how the water resource occurs and moves on a real time basis. Information that is essential to further sophisticate the management



of the watershed.

The main generator breakers at Kirkwood and Moccasin powerhouses were retrofitted with new lower maintenance systems using vacuum breaker technology. These breakers are the first line of protection for the generators and the power production system against a variety of damaging conditions. The newly retrofitted breakers will both improve availability and reduce maintenance of the generators and, in the long run, will increase unit availability.

Seven main power transformers at the Holm powerhouse, which were originally installed in 1959, were renovated. The innovation will increase equipment reliability and reduce ongoing maintenance requirements.

One generator at Holm Powerhouse was rewedged. The rewedging procedure restores the mechanical integrity of the winding coils and stator which will extend the useful life of the unit. This renovation should significantly reduce downtime of the Holm electricity generating equipment over the next twenty years

One turbine wheel each were replaced at both Holm and Kirkwood Powerhouses. These two new turbines wheels , due to a more modern design, will increase power production, system wide, by about four megawatts during times of available water. All Hetch Hetchy turbine wheels which were not



replaced were subjected to in-service, non-destructive, integrity testing. This procedure helps identify cracks or weaknesses in the metal and helps assure against breakdown and possible damage, not only to the turbine wheels themselves, but also to the housing in which they operate.

A new emergency power generator was installed in the O'Shaughnessy Camp area. This is a back up system and assures the functioning of the water quality monitoring during the power outages frequently experienced at this remote location.

Larger projects designed to increase the reliability and insure continued performance while decreasing ongoing maintenance include the rehabilitation of the Moccasin penstock anchor blocks (the concrete foundations which hold the penstock on the mountainside) and the re-roofing of the main Moccasin shop. An emergency was declared when the road to Early Intake (Holm and Kirkwood powerhouses) was threatened by possible landslides. The road was re-stabilized by driving pilings into the mountainside to bedrock and by extensive shoring.

## Programs Environmental

The proactive effort to bring Hetch Hetchy into full compliance with all environmental regulations progressed significantly during fiscal year 1994/95. Solutions to problems with waste water management at Holm, Early Intake and Moccasin were developed and approved by the



regulatory agencies. Construction of new systems for Holm and Early Intake is scheduled for the summer of 95. An investigation of soil and subsurface water contamination at the Warnerville Switch Yard (phase I) was completed. Remediation design and implementation will take two years. Ongoing efforts to monitor and remediate groundwater contamination at O'Shaughnessy have been completed. Final regulatory agency sign off, which will complete this effort, is expected during FY 1995/96. Extensive remediation of the soil and renovation of the water liming operation at the Rock River lime plant has cleaned up both the existing soil contamination and it operational source. A transportable treatment unit which enables Hetch Hetchy personnel to separate contaminates from waste water (such as that which occurs in transformer catch basins during rain,) has been designed and built to Hetch Hetchy specifications. The on-site separation of contaminates from water decreases the volume and cost of waste disposal very significantly by making it possible to dispose of only the contaminant and not the water itself as hazardous waste. This improvement in the handling of waste waters is particularly important since the actual volume of contaminated water has increased due to more stringent efforts to identify when water is legally considered contaminated.



## Water Quality

A study of the operation of the small water systems was completed during FY 1994/95. The manual which resulted from this study provides both operational and maintenance procedures for the watershed keepers and the sanitary engineers. New water tanks required by the State in furtherance of our filtration avoidance status for the Hetch Hetchy small water systems, were installed using in-house personnel.



## BUREAU OF ENERGY CONSERVATION

On July 1, 1993 the Bureau of Energy Conservation was placed within the Hetch Hetchy organization. The Bureau's mission is to reduce energy use in City facilities and to promote energy efficiency in the private, commercial and housing sectors. The Bureau operates a number of different programs addressing energy use in City government facilities. Most of them seek not only to save energy through increased efficiency, but also to save money through reducing the operations and maintenance demands on staff, and to improve working conditions through better lighting and heating. The Bureau provides energy management programs and services to all departments of the City. Recent highlights include:

Completed a technical energy audit of 1 million square feet in 13 City College facilities, and identified projects with \$240,888 in annual energy savings. City College is financing most project costs through a master lease, making this HH/BEC's first large project to include outside financing. The project will provide net benefits of more than \$2 million, including energy savings and avoided future light fixture replacement costs.

Provided boiler efficiency and maintenance training to 20 city maintenance personnel, and preventative maintenance services to 40 boilers. Completed energy audits of heating and ventilation systems in 6 facilities; identified projects with estimated annual savings of \$93,000, which will give a 1.2 year payback and \$1.2 million in lifetime energy savings.

Incorporated energy efficient design improvements in 20 new construction/renovation projects; these will provide \$1.5 million in lifetime energy savings, and a 40% return on investment for capital funds. Projects completed this year include City College Library, Park Police Station and a building commissioning plan for the Civic Center Courthouse.

Completed writing the Energy Shortage Response Plan, an element of the San Francisco Emergency Operations Plan. This energy plan provides for readiness and response procedures for contingencies involving fuel and/or utility supply shortages, in addition to energy supply operations in disaster response.

Completed lighting retrofits at the War Memorial, City College (downtown and John Adams sites) and Sunset Mental Health Center. Completed site visits at two homeless multi-service centers, Laguna Honda hospital, and 25 Van Ness. Continued cost share work with the Recreation and Parks Department.



With the assistance of grant funds, initiated a project to identify the elements of successful urban sustainability policies. Research includes surveying the public policy literature as well as other cities' experience with sustainability policies. Project includes three implementation plans aimed at municipal sector operations-- departmental incentives, lighting waste recycling, and energy efficient equipment purchasing. Project results to include general guidelines for the successful implementation of urban sustainability policies, which the grant funding agency will distribute nationally.

Continued with a program of energy-efficiency capital improvement projects in general-fund facilities: finalized design for retrofits at San Francisco General Hospital; upgraded the energy management system at Department of Social Services Headquarters; and performed a test installation of efficient lighting equipment at the Muni Van Ness station.

Worked with Purchasing Department staff to incorporate energy efficient lighting materials in the City's lamps and electrical materials contracts, ensuring that cost-competitiveness of these items was weighted in the award of contract bids. Subsidized some purchases of efficient lighting equipment to promote its use in City facilities.

Completed a study determining the total potential for energy savings in municipal facilities. This federally funded study summarized DSM potential by department, facility type and type of retrofit. Findings included an estimate of \$10-15 million of cost-effective conservation potential in General Fund facilities. Results are expected to inform a structured program of comprehensive retrofits.

Obtained grant funding for a project to assess alternative financing and project delivery systems for large scale multi-facility energy retrofit projects. The goal of this project will be to develop the project management and financing capability to enable the Bureau to more rapidly implement the remaining conservation potential in the municipal sector. Grant funds will come from USDOE through the Urban Consortium Energy Task Force.



## BUREAU OF LIGHT, HEAT AND POWER

In 1994/95, the Bureau achievements included:

Continued the conversion of City-owned street lights to high pressure sodium vapor (HPSV) lights at Park Merced Area - 77 each of 250-watt mercury vapor lights to 100-watt HPSV lights and 45 each of 400-watt mercury vapor lights to 150-watt HPSV lights.

In response to problems identified by citizens groups, law enforcement agencies and others, the Bureau increased general lighting levels in the following areas in the City:

Jackson Street between Kearny and Powell Streets - 12 each of 100-watt HPSV lights to 150-watt HPSV lights.

- Bowman Court, Rebecca Lane and Keith Street - 21 each of 70-watt HPSV lights to 100-watt HPSV lights.
- Dedman Court - 7 each of 70-watt HPSV lights to 100-watt HPSV lights.
- Dukes Court - 3 each of 70-watt HPSV lights to 100-watt HPSV lights.

Redesigned Dolores Heights Phase I Underground District 318 with decorative post-top lights on 16-foot poles (91 street lights).

Improved response time from 68% (total of 3991) in FY 93/94 to 83% (total of 2033) in FY 94/95 within the first 24 hours to repair street light outages.

## PUC Health and Safety Program

The PUC Health and Safety Program's mission is to provide PUC-wide technical support on health and safety issues, develop programs to reduce workplace injuries/illnesses and develop health and safety training programs. The Program was reorganized in FY 94/95 following the division of the PUC under Proposition M. Therefore activities in FY 94/95 were directed towards review of existing health and safety performance measures for Hetch Hetchy Water and Power and the San Francisco Water Department, and identification of future program needs. This review included assessing compliance with hazardous materials, health and safety, and training regulations for each facility.

Other significant projects included:

Technical health and safety support for the Coast Range Tunnel inspection project



Development and implementation of an Ergonomics Plan for City Distribution Division jackhammer operators, including a safety training program

Review of OSHA injury and illness record keeping procedures in PUC, training for record keepers on correct procedures, and revision of accident investigation paperwork.



## PUC BUREAUS

The Public Utilities Commission's two departments, Hetch Hetchy Water and Power and the Water Department, receive administrative and technical support from six service bureaus. This approach eliminates duplication of effort and contributes to more efficient operations.

### UTILITIES ENGINEERING BUREAU (UEB)

The Utilities Engineering Bureau (UEB) is responsible for project management, design engineering, construction monitoring and contract administration for the capital improvement program of the Public Utilities Commission. During this reporting period, the Bureau successfully completed 7 projects with a total cost of \$8,602,000. Major accomplishments included:

- The SFWD Fire Detection Project, costing \$462,914, was completed on December 2, 1994. This project improved the fire detection protection systems of the SFWD Administration building at 425 Mason Street.
- The Alameda Creek Diversion Dam - Sluice Gates, this \$716,000 project was completed on October 4, 1994. Corroded Sluice Gates at the Alameda Creek Diversion Dam were replaced to ensure safety of maintenance personnel and prevention of loss of water supply.
- The CDD McLaren Pump Station Standby Generator with \$900,000 project cost, constructed a standby generator system to allow pumps to be run at the McLaren pump station in the event of PG&E power loss. The project was completed on March 3, 1995.
- The Lombard Street Reservoir Repairs Project, an emergency repair of the reservoir concrete roof and support walls, was completed on September 15, 1994. The project cost was \$304,000.
- Axial Slip Joint and Concrete Vault Project with a total project cost of \$1.5 million was completed in June 1995. This project repaired the damage to two large diameter Hetch Hetchy pipelines which convey approximately 70% of the water consumed by the SFWD customers.



This damage was caused by the slow seismic creep continually occurring along the Hayward Fault.

- The Reline Forest Hill Concrete Tank project was completed June 15, 1995 with a cost of \$100,000. This project applied a water tight protective coating to the interior of this water tank that was suffering from deterioration due to cracks in the concrete.
- Construction of the Millbrae Shops Phase II-A was substantially completed in March 1995 with a total project cost of 5.19 million. This project relocated and updated existing fuel storage and dispensing facilities, constructed a north shops building and installed new and existing equipment in the shops to facilitate work of trades persons based at the SFWD headquarters in Millbrae.
- Cherry/Eleanor Pump Upgrade Project to retrofit two of the ten pump motors at the pump station with variable frequency drive speed control was completed in May of 1995. The total project cost for this project was \$140,000.

#### BUREAU OF PERSONNEL & TRAINING (BPT)

The Bureau of Personnel and Training is responsible for providing all services related to human resource management for the Public Utilities Commission. BPT acts as the liaison with the Department of Human Resources and the Civil Service Commission, and provides support services in recruitment, payroll, classification, position control, labor relations, AA/EEO, ADA accommodation requests, training, exams and general personnel administration.

Major activities included:

- Classification, recruitment, examination, and hiring of management and staff positions for the PUC Departments and Bureaus
- Implementation comprehensive supervisory/management training program
- Administration of random drug testing program



- Publication of the annual PUC Affirmative Action Plan
- Development and implementation o the PUC wide workplace violence training
- Development of examinations and posting of eligible lists for high priority PUC positions
- Facilitation of reclassification of PUC management position classification survey
- Participation in city-wide negotiations with major PUC bargaining units
- Advise, guidance and assistance with PUC wide disciplinary matters

#### **BUREAU OF MANAGEMENT INFORMATION SYSTEMS**

The Bureau of Management Information Systems provides data processing, computer systems development and office automation services to all departments and bureaus of the Public Utilities Commission. BMIS also provides these services to the Department of Public Transportation on a work order basis.

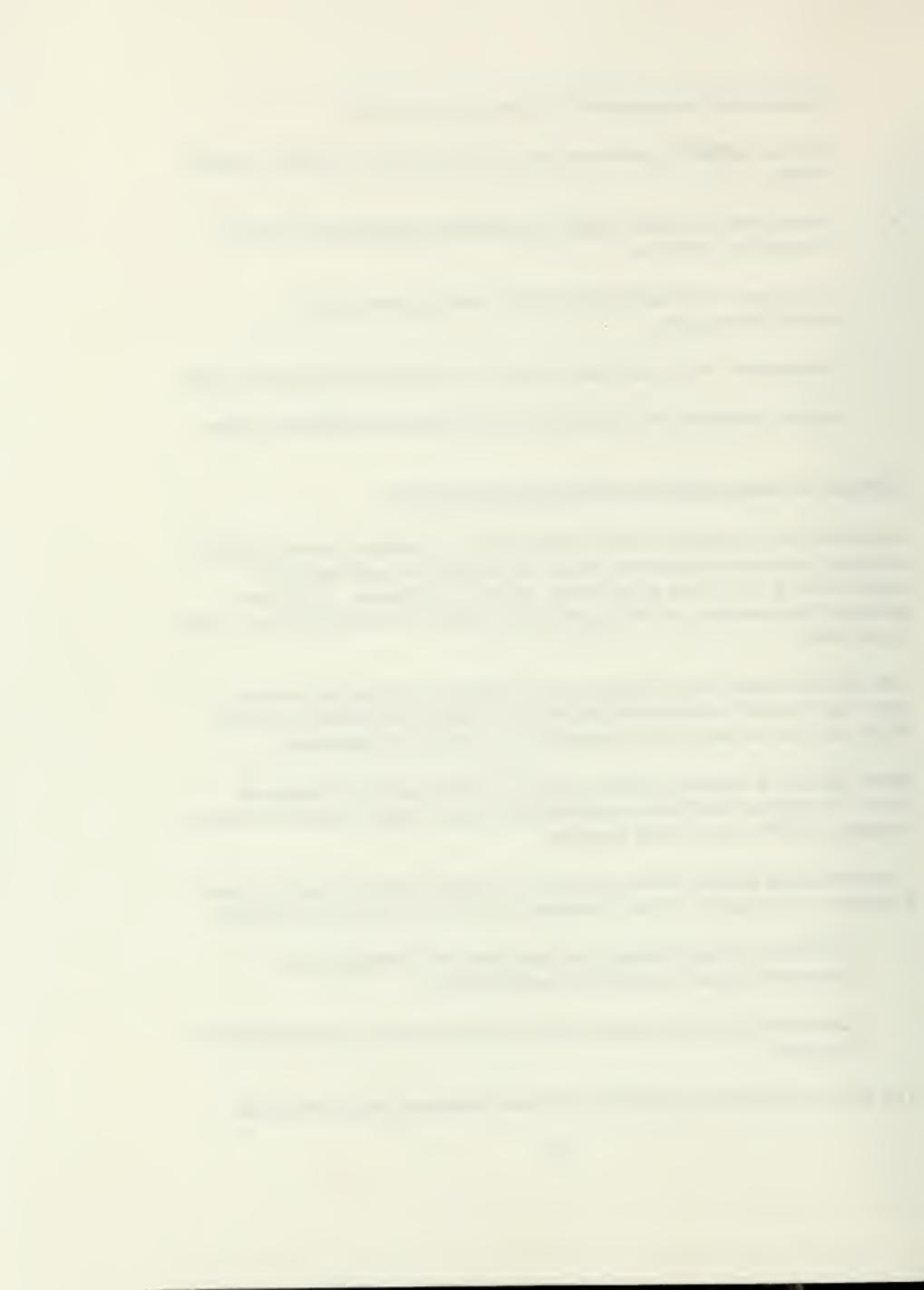
This Bureau maintains and improves the computer systems that process water billing data for the Water Department, vehicle maintenance data for MUNI, and payroll and other financial data for all PUC organizations.

BMIS operates a central computer center on a 24 hour/day, 7 day/week basis. In addition, the Bureau supports hundreds of micro computers that are installed at all PUC and MUNI locations.

The data center places much emphasis on internal procedures that maximize efficiency and reliability. This is evidenced by the following achievements:

- The PUC computer network of more than 300 terminals was operational better than 99% of available time
- Computer generated reports were delivered on-time more than 98% of the time

The office automation capabilities were much improved during this fiscal



year. An information network that electronically links all major work sites was established thereby providing E-mail for many staff members.

Also during this fiscal year a Capital Projects Data Base was developed that provides PUC management with enhanced capabilities to monitor the status of all of the organization's capital improvement projects.

#### **SYSTEM PLANNING AND REGULATORY COMPLIANCE (SPARC)**

The Bureau startup focused on the transition of resource planning from the Water Department to SPARC and the monitoring of water use to the operating divisions. Resource and Planning staff worked to complete the Ground Water Master Plan and work with the Department of Public Works on the in-city water recycling project. The Hetch Hetchy Water Treatment Improvement Program completed a sanitary survey of the Hetch Hetchy watershed, coordinated watershed improvements on the HH Aqueduct and in Yosemite National Park and worked to initiated regulatory and legislative actions intended to ensure Hetchy's filtration avoidance status for the long term.

In March, the Department experienced treatment failures at the Sunol Valley Water Treatment Plant. On March 13, 1995 the Sunol plant unsuccessfully treated high turbidity Hetch Hetchy water resulting in the delivery of water to consumers that exceeded the turbidity standards for drinking water. On March 20, 1995 the Sunol plant experienced difficulties again, this time in treating a blend of Calaveras Reservoir and Hetch Hetchy waters.

In immediate response to these incidents, the Public Utilities Commission authorized a review of the incident by a team of outside experts. Subsequently, the California Department of Health Services ordered such an evaluation, as well. The external evaluation will be completed in August, 1995. It will document a variety of problems and recommended actions for improvement.



## BUREAU OF FINANCE

The Bureau of Finance provides all financial support to the PUC Departments and Bureaus such as coordinate the development and monitoring of annual operating and capital budgets, provide monthly and annual financial statements, develop projections of Water revenues and revenue requirement for Rate Administrator analysis, develop retail and wholesale rates for water service and develop Suburban revenue requirement in accordance with Settlement Agreement and Master Sales Contract.

### Accomplishments for 1994-95

- Monitored financial performance of operating units against budget and prepared monthly financial reports for distribution to senior managers and members of the Public Utilities Commission
- Prepared quarterly reports to Mayor on key financial performance factors
- Coordinated the development of both line item and mission driven budgets for PUC Bureaus, Hetch Hetchy and the Water Department
- Assisted external auditors in the performance of the annual financial audit and the supplementary compliance audit required by the Master Water Sales contract between the City and its wholesale customers
- Converted accounting records and procedure to facilitate the implementation of a new on-line accounting software package
- Assisted the Water Department to implement the recommendations of the management audit performed by the Budget Analyst
- Implemented a new billing system for lease and permit fees
- Analyzed Water Department cost of service and developed Rate Administrator recommendations to meet revenue requirement and in accordance with terms of Master Water Sales Contract



FIG. 1. Scatter plot of the ratio of the variance of the annual mean precipitation to the variance of the annual mean temperature (P/T) versus the correlation coefficient ( $r$ ) for 10 models.

## **FINANCIAL STATEMENTS**

## Community Health Assessment

**SAN FRANCISCO WATER DEPARTMENT  
AND HETCH HETCHY PROJECT  
(A Component of the City and County  
of San Francisco, California)**

**Combined Financial Statements as of and for the Years Ended  
June 30, 1995 and 1994, Supplemental Schedules as of and for  
the Year Ended June 30, 1995, and Independent Auditors' Report**



SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT (A Component of  
the City and County of San Francisco, California)

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**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT (A Component of  
the City and County of San Francisco, California)**

**COMBINED BALANCE SHEETS**

JUNE 30, 1995 AND 1994 (In thousands)

ASSETS	1995	1994	EQUITY AND LIABILITIES	1995	1994
<b>UTILITY PLANT (Notes 3 and 13):</b>			<b>EQUITY:</b>		
Water power	\$ 569,693	\$ 661,387	Contributed capital	\$ .75	\$ 44,207
Joint water and power	123,004	197,041	Retained earnings	508,265	515,606
Construction in progress	140,531	141,947	Total equity	508,340	559,813
	<u>26,984</u>	<u>24,192</u>			
Total utility plant	980,812	1,041,567	<b>LONG-TERM DEBT (Note 6):</b>		
Less accumulated depreciation and amortization	<u>(385,591)</u>	<u>(381,067)</u>	General obligation bonds	4,675	5,790
Net utility plant	<u>594,861</u>	<u>643,500</u>	Revenue bonds	269,742	277,764
			Total long-term debt	<u>274,417</u>	<u>278,554</u>
<b>RESTRICTED ASSETS (Notes 4 and 5):</b>			<b>OTHER LONG-TERM LIABILITIES:</b>		
Equity in deposits and investments of the City Treasurer	23,945	30,638	Accrued vacation, sick leave, and workers' compensation	6,929	7,193
Deposits in escrow	970	1,097	Damage and claims liability	3,291	3,291
Investments held by trustee	108,634	108,688	Contract retention in escrow (payable from restricted assets)	970	1,097
Interest receivable	1,566	1,439	Revenue bonds interest (payable from restricted assets)	2,812	2,816
	<u>135,115</u>	<u>141,862</u>	Total other long-term liabilities	<u>14,022</u>	<u>14,467</u>
Total restricted assets			<b>CURRENT LIABILITIES:</b>		
			General obligation bonds (Note 6)	1,115	1,665
			Revenue bonds (Note 6)	5,435	5,115
			Accounts payable	6,934	5,680
			Accrued payroll	2,039	1,762
			Accrued vacation, sick leave, and workers' compensation	3,549	3,527
			Bond interest payable	71	89
			Retention due contractors	1,336	987
			Suburban water rate agreement (Note 7)	5,939	
			Damage and claims liability	2,750	2,750
			Deposits and construction advances	1,378	1,517
			Capital leases payable	74	74
			Other	<u>115</u>	<u>151</u>
Total receivables			Total current liabilities	<u>30,701</u>	<u>27,317</u>
Materials and supplies - at average cost	2,666	4,138			
Total current assets	<u>97,564</u>	<u>94,789</u>	<b>TOTAL LIABILITIES</b>	<u>319,140</u>	<u>320,338</u>
<b>TOTAL ASSETS</b>	<b>\$ 827,480</b>	<b>\$ 880,151</b>	<b>TOTAL EQUITY AND LIABILITIES</b>	<b>\$ 827,480</b>	<b>\$ 880,151</b>

See notes to combined financial statements.





**INDEPENDENT AUDITORS' REPORT**

The Honorable Ed Harrington, Controller  
City and County of San Francisco:

We have audited the accompanying combined financial statements of the San Francisco Water Department ("SFWD") and Hetch Hetchy Project ("HH"), a component of the City and County of San Francisco, California (the "City") as of June 30, 1995 and 1994 and for the years then ended, listed in the foregoing table of contents. These combined financial statements are the responsibility of the management of the SFWD and HH. Our responsibility is to express an opinion on these combined financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the combined financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the combined financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall combined financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such combined financial statements present fairly, in all material respects, the financial position of the SFWD and HH at June 30, 1995 and 1994, and the results of their operations and their cash flows for the years then ended in conformity with generally accepted accounting principles.

As discussed in Note 1 to the financial statements, the combined financial statements referred to above present only the SFWD and HH and are not intended to present fairly the financial position and results of operations of the City, in conformity with generally accepted accounting principles.

Our audits were conducted for the purpose of forming an opinion on the combined financial statements taken as a whole. The supplemental schedules listed in the foregoing table of contents are presented for the purpose of additional analysis and are not a required part of the combined financial statements. These schedules are the responsibility of the management of the SFWD and HH. Such schedules have been subjected to the auditing procedures applied in our audits of the combined financial statements and, in our opinion, are fairly stated in all material respects when considered in relation to the combined financial statements taken as a whole.

*Deloitte + Touche LLP Mah + Louis Jeanpierre + Co*

San Francisco, California  
June 26, 1996



SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT (A Component of  
the City and County of San Francisco, California)

COMBINED BALANCE SHEETS  
JUNE 30, 1995 AND 1994 (In thousands)

ASSETS	1995	1994	EQUITY AND LIABILITIES		1995	1994
UTILITY PLANT (Notes 3 and 13):			EQUITY:			
Water power	\$ 569,693	\$ 661,387	Contributed capital		\$ 75	\$ 44,207
Joint water and power	123,604	197,041	Retained earnings		508,263	515,606
Construction in progress	140,531	141,947	Total equity		508,340	559,811
	<u>26,984</u>	<u>24,192</u>				
Total utility plant	980,812	1,024,567	LONG-TERM DEBT (Note 6):			
Less accumulated depreciation and amortization	<u>(385,931)</u>	<u>(381,067)</u>	General obligation bonds		4,675	5,790
Net utility plant	<u>594,861</u>	<u>643,500</u>	Revenue bonds		269,742	272,764
			Total long-term debt		<u>274,417</u>	<u>278,554</u>
RESTRICTED ASSETS (Notes 4 and 5):			OTHER LONG-TERM LIABILITIES:			
Equity in deposits and investments of the City Treasurer	23,945	30,638	Accrued vacation, sick leave, and workers' compensation		6,929	7,193
Deposits in escrow	970	1,097	Damage and claims liability		3,291	3,291
Investment held by trustee	108,634	108,688	Contract retention in escrow (payable from restricted assets)		970	1,097
Interest receivable	<u>1,566</u>	<u>1,439</u>	Revenue bonds interest (payable from restricted assets)		2,832	2,886
	<u>135,115</u>	<u>141,862</u>	Total other long-term liabilities		<u>14,022</u>	<u>14,467</u>
Total restricted assets			CURRENT LIABILITIES:			
			General obligation bonds (Note 6)		1,115	1,665
CURRENT ASSETS:			Revenue bonds (Note 6)		5,435	5,115
Cash (Note 5)	118	118	Account payroll		6,934	5,680
Equity in deposits and investments of the City Treasurer (Note 5)	76,989	71,114	Accrued vacation, sick leave, and workers' compensation		2,039	1,762
Receivables:			Bond interest payable		3,549	3,527
Water and power (net of allowance for doubtful accounts of \$143 in 1995 and 1994)	16,036	15,595	Retention due contractors		71	89
Suburban water rate agreement (Note 7)		2,320	Suburban water rate agreement (Note 7)		1,356	987
Interest and other	1,695	<u>1,504</u>	Damage and claims liability		5,939	5,115
			Deposits and construction advances		2,750	2,750
Total receivables	17,731	<u>19,419</u>	Capital leases payable		1,378	1,317
			Other		74	74
Materials and supplies - at average cost	2,666	4,138			115	151
Total current assets	<u>97,504</u>	<u>94,789</u>	Total current liabilities		<u>10,701</u>	<u>27,317</u>
TOTAL ASSETS	<u>\$827,480</u>	<u>\$ 860,151</u>	TOTAL LIABILITIES		<u>319,140</u>	<u>320,338</u>
			TOTAL EQUITY AND LIABILITIES		<u>\$ 827,480</u>	<u>\$ 860,151</u>

See notes to combined financial statements.



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT (A Component of  
the City and County of San Francisco, California)**

**COMBINED STATEMENTS OF OPERATIONS  
YEARS ENDED JUNE 30, 1995 AND 1994 (In thousands)**

	1995	1994
<b>OPERATING REVENUES:</b>		
Water sales	\$ 103,819	\$ 102,644
Electricity sales	74,429	76,589
Rental income	4,107	4,682
Service installation income	<u>1,911</u>	<u>1,594</u>
 Total operating revenues	<u>184,266</u>	<u>185,509</u>
<b>OPERATING EXPENSES:</b>		
Purchased energy	15,639	27,896
Transmission and distribution	28,760	29,935
Operations and maintenance	34,262	33,926
General and administrative	33,967	37,157
Depreciation and amortization	25,915	24,633
Property taxes	<u>3,105</u>	<u>3,052</u>
 Total operating expenses	<u>141,648</u>	<u>156,599</u>
<b>OPERATING INCOME</b>	<u>42,618</u>	<u>28,910</u>
<b>NONOPERATING REVENUES (EXPENSES):</b>		
Interest income	12,737	12,539
Interest expense	(18,626)	(18,787)
Operation of Municipal Railway overhead lines		(425)
Gain on sale of utility plant	57	2,440
Other	<u>2,047</u>	<u>2,291</u>
 Net nonoperating expenses	<u>(3,785)</u>	<u>(1,942)</u>
<b>INCOME BEFORE OPERATING TRANSFERS</b>	<u>38,833</u>	<u>26,968</u>
<b>OPERATING TRANSFERS:</b>		
Tax support transfers from the City (Note 6)	1,921	1,691
General fund transfers to the City	(28,344)	(32,491)
Operating transfers to Municipal Railway (Note 11)	<u>(7,538)</u>	<u>(7,538)</u>
 Total operating transfers	<u>(33,961)</u>	<u>(38,338)</u>
<b>NET INCOME (LOSS)</b>	<u>\$ 4,872</u>	<u>\$ (11,370)</u>

See notes to combined financial statements.



SAN FRANCISCO WATER DEPARTMENT AND  
 HETCH HETCHY PROJECT (A Component of  
 the City and County of San Francisco, California)

COMBINED STATEMENTS OF EQUITY  
 YEARS ENDED JUNE 30, 1995 AND 1994 (In thousands)

	Contributed Capital	Retained Earnings	Total
EQUITY, JULY 1, 1993	\$ 45,387	\$ 525,796	\$ 571,183
NET LOSS		(11,370)	(11,370)
DEPRECIATION ON FIXED ASSETS ACQUIRED WITH CAPITAL GRANTS AND CONTRIBUTIONS	(1,180)	1,180	
EQUITY, JUNE 30, 1994	44,207	515,606	559,813
NET INCOME		4,872	4,872
RESIDUAL EQUITY TRANSFER (Note 13)	(42,950)	(13,395)	(56,345)
DEPRECIATION ON FIXED ASSETS ACQUIRED WITH CAPITAL GRANTS AND CONTRIBUTIONS	(1,182)	1,182	
EQUITY, JUNE 30, 1995	\$ 75	\$ 508,265	\$ 508,340

See notes to combined financial statements.



SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT (A Component of  
the City and County of San Francisco, California)

COMBINED STATEMENTS OF CASH FLOWS  
YEARS ENDED JUNE 30, 1995 AND 1994 (in thousands)

	1995	1994
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Operating income	\$ 42,618	\$ 28,910
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation and amortization	25,915	24,633
Effect of changes in:		
Water and power receivables	2,813	(2,384)
Materials and supplies	(419)	274
Interest and other receivables	(191)	399
Accounts payable	(2,726)	(7,202)
Accrued payroll	277	59
Receivables/payable to the City	(871)	
Other liabilities	4,731	961
Net cash provided by operating activities	<u>73,018</u>	<u>44,779</u>
<b>CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES:</b>		
Operating transfers received	1,921	1,691
Operating transfers out	(35,882)	(40,029)
Other nonoperating expenses - net	<u>2,145</u>	<u>1,964</u>
Net cash used by noncapital financing activities	<u>(31,816)</u>	<u>(36,374)</u>
<b>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:</b>		
Interest paid on long-term debt	(19,905)	(20,153)
Principal paid on long-term debt	(4,367)	(3,820)
Acquisition of utility plant	(30,533)	(27,108)
Proceeds from the sale of utility plant	67	2,453
Payment of capital lease obligations	<u>(74)</u>	<u>(397)</u>
Net cash used by capital and related financing activities	<u>(54,812)</u>	<u>(49,025)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Interest income received	12,610	12,654
Purchases of investments held by trustee - restricted	(10,329)	(6,862)
Receipts from maturities of investments held by trustee - restricted	10,477	7,372
Change in investments held by trustee - restricted	<u>(93)</u>	<u>(121)</u>
Net cash provided by investing activities	<u>12,665</u>	<u>13,043</u>
<b>DECREASE IN CASH AND CASH EQUIVALENTS</b>		
<b>CASH AND CASH EQUIVALENTS:</b>	<b>(945)</b>	<b>(27,577)</b>
Beginning of year	<u>102,967</u>	<u>130,544</u>
End of year	<u>\$ 102,022</u>	<u>\$ 102,967</u>
<b>REPORTED AS:</b>		
Cash	\$ 118	\$ 118
Deposits in escrow	970	1,097
Equity in deposits and investments of the City Treasurer - restricted	23,945	30,638
Equity in deposits and investments of the City Treasurer - unrestricted	76,989	71,114
<b>TOTAL CASH AND CASH EQUIVALENTS, End of year</b>	<b>\$ 102,022</b>	<b>\$ 102,967</b>
<b>NONCASH CAPITAL AND RELATED FINANCING INFORMATION:</b>		
Residual equity transfer (Note 13)	\$ 56,345	
Revenue bond interest accretion	1,884	\$ 1,741
Amortization of bond discount and issuance costs	529	529

See notes to combined financial statements.



SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT (A Component of  
the City and County of San Francisco, California)

NOTES TO COMBINED FINANCIAL STATEMENTS  
YEARS ENDED JUNE 30, 1995 AND 1994 (In thousands)

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1. ORGANIZATION AND BASIS OF PRESENTATION

*Description of Reporting Entity* - The combined financial statements include the accounts of the San Francisco Water Department ("SFWD") and the Hetch Hetchy Project ("HH"), whose operations are interrelated. All significant inter-entity transactions have been eliminated. The combined entities are a component unit of the City and County of San Francisco (the "City") and, as such, are included in the Comprehensive Annual Financial Report of the City as enterprise funds.

*Basis of Accounting* - SFWD and HH are accounted for using the accrual method. Under this method, revenues are recorded when earned and expenses are recorded when the related liability is incurred.

SFWD and HH apply all Governmental Accounting Standards Board ("GASB") Statements, as well as the Financial Accounting Standards Board Statements and Interpretations, Accounting Principles Board Opinions and Accounting Research Bulletins issued on or before November 30, 1989, unless those pronouncements conflict or contradict GASB pronouncements.

2. SIGNIFICANT ACCOUNTING POLICIES

*Utility plant* is stated at cost. Depreciation and amortization are computed by the straight-line method based on the estimated useful lives of the related assets which range from 3 to 75 years for equipment and 3 to 173 years for facilities and improvements. No depreciation or amortization is recorded in the year of acquisition and a full year's depreciation or amortization is recorded in the year of disposal. Construction in progress represents the design and construction costs of various uncompleted projects.

Certain projects are constructed using the proceeds from the sale of bonds. A portion of interest costs incurred during the project construction period are capitalized as a component of project cost. Interest cost capitalized was \$1,207 and \$1,344 in 1995 and 1994, respectively.

Capitalized leased assets are included in equipment. Amortization of the leased assets is computed on the straight-line method and based on the estimated useful lives of the equipment.

*Cash and cash equivalents* include all highly liquid investments with an original maturity of three months or less and all pooled deposits and investments of the City Treasurer.

*Accrued Vacation, Sick Leave and Workers' Compensation* - Accrued vacation pay, which may be accumulated up to ten weeks per employee, is charged to expense as earned. Unused sick leave accumulated on or prior to December 6, 1978 is vested and payable upon termination of employment by retirement, death or disability caused by industrial accident. Sick leave earned subsequent to that date is nonvesting, charged to expense when paid, and may be accumulated up to six months per employee. SFWD and HH are self-insured for workers' compensation claims and accrue the estimated cost of those



claims, as well as the cost of incurred but not reported claims. For the years ended June 30, 1995 and 1994, workers' compensation claims payments were \$869 and \$941, respectively.

*Bond discount and issuance costs* are amortized over the term of the related bonds using a method which approximates the interest method.

*Damage and Claims Liability* - SFWD and HH are self-insured for general liability and property damage claims. The liability represents an estimate of the cost of all outstanding claims and incurred but not reported claims. For the years ended June 30, 1995 and 1994, general liability and property damage claims payments were \$728 and \$1,551, respectively.

*Revenue Recognition* - Revenues from water and power services furnished to consumers are recorded in the combined financial statements when earned. In general, customers are billed on a cyclical basis with large industrial customers billed monthly and all other customers bimonthly.

SFWD is responsible for collecting certain taxes and service charges for the City. Such amounts are remitted to the City when collected. Since such amounts are not revenues of the SFWD, they are not included as receivables or revenues in the accompanying combined financial statements.

*Capital grants and contributions* from external sources are recognized as contributed capital at the time reimbursable expenditures related to grants are incurred. Contributed capital is amortized based on the depreciation recognized on the related assets.

### 3. UTILITY PLANT

Utility plant at June 30, 1995 and 1994 consisted of the following:

	1995	1994
Land	\$ 21,437	\$ 21,437
Equipment	58,037	111,673
Facilities and improvements	874,354	867,265
Construction in progress	<u>26,984</u>	<u>24,192</u>
 Total	 980,812	 1,024,567
Less accumulated depreciation and amortization	<u>(385,951)</u>	<u>(381,067)</u>
 Net utility plant	 <u>\$ 594,861</u>	 <u>\$ 643,500</u>

Depreciation and amortization expense was \$25,915 and \$24,633 in 1995 and 1994, respectively. These amounts include \$1,182 and \$1,180 in 1995 and 1994, respectively, of depreciation expense for fixed assets acquired with capital grants and contributions.

At June 30, 1994, equipment under capital leases had a recorded cost of \$1,758.

Also, see Note 13.



#### 4. RESTRICTED ASSETS

Certain borrowing agreements require that SFWD and HH maintain certain restricted cash and investment balances in trust. Restricted assets consisted of the following at June 30, 1995 and 1994:

	1995	1994
Equity in deposits and investments		
of the City Treasurer:		
1972 bond fund	\$ 423	\$ 437
1987 revenue bond fund	7,308	7,448
1991 revenue bond fund	<u>16,214</u>	<u>22,753</u>
Total	<u>23,945</u>	<u>30,638</u>
Deposits in escrow - contract retention	970	1,097
Investments held by trustee:		
1987 revenue bond fund	3,640	3,461
1991 revenue bond fund	4,497	4,270
1992 revenue bond fund	<u>100,497</u>	<u>100,957</u>
Total	<u>108,634</u>	<u>108,688</u>
Interest receivable:		
1987 revenue bond fund	136	67
1991 revenue bond fund	296	289
1992 revenue bond fund	<u>1,134</u>	<u>1,083</u>
Total	<u>1,566</u>	<u>1,439</u>
Total restricted assets	<u>\$135,115</u>	<u>\$141,862</u>

#### 5. DEPOSITS AND INVESTMENTS

*Cash and Deposits in Escrow* - At June 30, 1995 (and 1994), the carrying amount of SFWD's and HH's cash was \$118, with a corresponding bank balance of \$103. The carrying amount of SFWD's and HH's deposits in escrow was \$970 (1994, \$1,097), with a corresponding bank balance of \$1,004 (1994, \$1,081). Of the bank balances, \$445 (1994, \$644) was insured by Federal Deposit Insurance Corporation and \$662 (1994, \$540) was collateralized in accordance with Section 53652 of the California Government Code with securities held by the pledging institution in SFWD's and HH's name.

*Investments* - The equity in deposits and investments of the City Treasurer of \$100,934 (1994, \$101,752) is held by the City pursuant to investment policy guidelines established by the City Treasurer. The objectives of the policy are, in order of priority, preservation of capital, liquidity and yield. The policy addresses soundness of financial institutions in which the City will deposit funds, types of investment instruments as permitted by the California Government Code, and the percentage of the portfolio which may be invested in certain instruments with longer terms to maturity. The Comprehensive Annual Financial Report of the City categorizes the level of risk associated with the City's pooled deposits and investments.



At June 30, 1995 and 1994, investments held by the trustee, who is a counterparty, in the SFWD's name included the following:

	1995		1994	
	Carrying Amount	Market Value	Carrying Amount	Market Value
U.S. Treasury bills	\$ 5,198	\$ 5,198	\$ 4,885	\$ 4,885
U.S. Treasury notes	103,217	103,122	103,676	103,652
Money market	219	219	127	127
Total	<u>\$ 108,634</u>	<u>\$ 108,539</u>	<u>\$ 108,688</u>	<u>\$ 108,664</u>

## 6. LONG-TERM DEBT

The SFWD's long-term debt consisted of the following at June 30, 1995 and 1994:

	Interest Rates	Last Year Series Matures	1995	1994
General obligation bonds -				
1972 Municipal Water System Bonds	4.0% - 5.7%	2000	\$ 5,790	\$ 7,455
Less current portion of general obligation bonds			(1,115)	(1,665)
Long-term portion of general obligation bonds			<u>\$ 4,675</u>	<u>\$ 5,790</u>
Revenue Bonds:				
1987 Water Revenue Refunding Bonds	6.65% - 8.5%	1998	\$107,521	\$109,699
1991 Water Revenue Bonds	5.30% - 7.4%	2021	68,247	69,300
1992 Water Revenue Refunding Bonds	5.35% - 6.5%	2016	107,180	107,180
Unamortized bond discount and issuance costs			(7,771)	(8,300)
Total revenue bonds			275,177	277,879
Less current portion of revenue bonds			(5,435)	(5,115)
Long-term portion of revenue bonds			<u>\$269,742</u>	<u>\$272,764</u>

The 1987 and 1991 Revenue Bonds include capital appreciation bonds with original principal amounts of \$13,132 and \$1,051, respectively. Interest is due only upon redemption or maturity of these capital appreciation bonds. The accrued interest is added to the principal balance. The recorded amount of the 1987 and 1991 capital appreciation bonds at June 30, 1995 was \$23,536 and \$1,382, respectively.

In 1979, the electorate of the City approved a proposition whereby an amount sufficient to pay the annual bond interest and redemption costs of general obligation bonds of the SFWD is provided in the City's property tax levy and is recorded as a transfer from the City. Additionally, a like amount is transferred from the SFWD to the City. During the years ended June 30, 1995 and 1994, bond interest and redemption costs of general obligation bonds of the SFWD and HH were \$2,002 and \$1,691, respectively.

In fiscal 1988, the SFWD defeased certain 1985 revenue bonds by placing the proceeds of the 1987 revenue bonds in an irrevocable trust to provide for all future debt service payments on the 1985 bonds. Accordingly, the trust account assets and the liability for the defeased bonds are not included in the



combined financial statements. At June 30, 1995, bonds with an outstanding principal balance of \$96,075 are considered defeased.

In fiscal 1992, the SFWD issued \$107,180 of revenue bonds pursuant to a crossover refunding of 1987 Water Revenue Refunding Bonds. The proceeds were used to purchase U.S. government securities which were placed into an irrevocable trust to be used for the payment of interest on the 1992 bonds and \$460 per year of principal due on the 1987 bonds through November 1, 1997 (crossover date), at which time the remaining proceeds will be used to advance refund the 1987 bonds. The debt service requirements of the 1992 bonds after the crossover date will be made from the net revenues of the SFWD.

Minimum future obligations on long-term debt (including interest of \$170,539) at June 30, 1995 are as follows:

Year ending June 30:

1996	\$ 23,095
1997	23,118
1998	114,494
1999	16,321
2000	15,741
Thereafter	<u>258,737</u>

Total	<u>\$ 451,506</u>
-------	-------------------

Unamortized bond discount and issuance costs reflected in minimum future obligations on long-term debt are \$7,771 at June 30, 1995.

## **7. SUBURBAN WATER RATE AGREEMENT**

On July 1, 1984, certain suburban customers entered into an agreement that establishes water rates to be charged to the suburban customers. In accordance with the agreement, the water rates are calculated based on a prescribed allocation of expenses and an allowed rate of return on certain water-related assets. During fiscal year 1995 and 1994, water sales charged to such suburban customers were \$51,893 and \$46,546, respectively. Such amounts are subject to final review by the suburban customers based on the suburban revenue requirement calculation. The suburban revenue requirement calculation results in a receivable from or payable to the suburban customers at year end.

During fiscal year 1995, the suburban customers raised various issues which impact the calculation of the amounts charged to the suburban customers for the years ended June 30, 1993 and 1992 including the classification and capitalization of certain water-related assets as part of the wholesale rate base, the method of computing capitalized interest, and the maintenance and calibration of certain meters. These matters have been addressed by the suburban customers and the City through formal arbitration proceedings since November 1994. Certain of these matters have been settled as of June 26, 1996 and the City, through SFWD, has agreed to a water sales revenue adjustment of \$6,161 which has been accrued as of June 30, 1995. The City, through SFWD has also made a cash payment of \$380 to settle certain other claims of suburban customers. The arbitration proceedings will continue with respect to the resolution of the remaining matter and the amount of additional revenue adjustments is not determinable.



## 8. EMPLOYEES' RETIREMENT PLAN

*Plan Description* - All full-time permanent employees of the SFWD and HH are eligible to participate in the City and County of San Francisco Employees' Retirement System (the "Plan"). The Plan is a single-employer defined benefit retirement plan for all covered employees of the City. The Plan provides retirement, disability and death benefits based on specified percentages of average final compensation. Employees vest after 5 years of service and may receive retirement benefits at age 50. These benefit provisions and all other requirements are established by the Plan's provisions.

SFWD's and HH's covered payroll for employees participating in the Plan for the years ended June 30, 1995 and 1994 was \$35,067 and \$34,483, respectively. SFWD's and HH's 1995 and 1994 payroll for all employees was \$41,690 and \$38,058, respectively. SFWD and HH were obligated to contribute 6.14% and 6.25% to the Plan for covered employees in 1995 and 1994, respectively. Employee contribution rates for full benefits range from 7.5% to 8.0%, as defined in the Plan's provisions.

*Funding Status and Progress* - The "pension benefit obligation" is determined by the Plan's actuary and is a standardized disclosure measure that results from applying actuarial assumptions to estimate the present value of pension benefits, adjusted for the effects of projected salary increases and step rate benefits, to be payable in the future as a result of employee service to date. The measure is intended to help users assess the funding status of the Plan to which contributions are made on a going-concern basis and assess progress made in accumulating sufficient assets to pay benefits when due. The measure is the actuarial present value of credited projected benefits and is independent of the funding method used.

The pension benefit obligation was computed as part of an actuarial valuation performed as of June 30, 1994, the latest available valuation. The significant actuarial assumptions used in the 1994 valuation to compute the pension benefit obligation were an assumed rate of return on investment assets of 8%, inflation element in wage increases of 5.25%, salary merit increases ranging from .5% to 9% and postretirement benefit increases based on required annual cost-of-living adjustments, which are a maximum of 2% per year for 75% of retirees and over 95% of active members.

The wage inflation assumption was decreased from 5.5% to 5.25% from the 1994 valuation and a one-year assumption was made for salary increases of miscellaneous (nonpolice or fire personnel) employees of 2% which had the effect of decreasing the pension benefit obligation by \$170 million.

The funding status applicable to the Plan at June 30, 1994 is as follows:

Pension benefit obligation	\$ 5,690,247
Net assets available for benefits at cost (market value of \$6,016,249)	<u>5,689,129</u>
Unfunded pension benefit obligation	<u>\$ 1,118</u>

*Actuarially Determined Contributions Required and Contributions Made* - The funding policy of the Plan provides for actuarially determined periodic contributions by SFWD and HH at rates such that sufficient assets will be available to pay the Plan benefits when due. SFWD's and HH's contributions to the Plan for the year ended June 30, 1995 were made in accordance with the actuarially determined requirements computed as of June 30, 1994. SFWD's and HH's total contributions for the years ended June 30, 1995 and 1994 were \$2,152 (6.14% of current covered payroll) and \$2,154 (6.25% of current covered payroll), respectively. These contributions represent 2.56% and 2.13%, respectively, of the total



contributions made to the Plan by all City Fund groups in 1993 and 1994. Employees' contributions for the years ended June 30, 1995 and 1994 were \$2,575 (7.34% of current covered payroll) and \$2,384 (6.91% of current covered payroll), respectively.

The contribution rate is determined using the entry age normal cost method. The unfunded actuarial liability is amortized over the period ending June 30, 2000.

Significant actuarial assumptions used in the 1994 valuation to compute the actuarially determined contributions requirement are the same as those used to compute the pension benefit obligation as described above.

Ten-year historical trend data which provides information about progress made in accumulating sufficient assets to pay benefits when due can be found in the financial statements and supplemental schedules of the Plan.

## **9. HEALTH CARE BENEFITS**

Health care benefits for employees, retired employees and surviving spouses (beneficiaries) are financed by beneficiaries and by the City through the Health Service System of the City. The contribution for all of the City Fund groups is determined by charter provision based on similar contributions made by the ten most populous counties in California. The costs to SFWD and HH for the years ended June 30, 1995 and 1994 were \$2,122 and \$1,700, respectively, including \$879 and \$952, respectively, to provide postretirement health care benefits for retired employees. The City's liability for postretirement health care benefits is limited to its annual contribution.

## **10. DEFERRED COMPENSATION PLAN**

The City offers its employees, including SFWD and HH employees, a deferred compensation plan created in accordance with Internal Revenue Code Section 457. The plan, available to all City employees, permits them to defer a portion of their salary until future years. The deferred compensation is not available to employees until retirement, termination, or certain other covered events.

As required by IRC Section 457, all amounts of compensation deferred under the plan, all property and rights purchased with those amounts and all income attributable to those amounts (until paid or made available to the employee or other beneficiary) remain the property of the City, subject only to the claims of the City's general creditors. Participants' rights under the plan are equal to those of general creditors of the City in an amount equal to the fair market value of the deferred account for each participant. Amounts deferred under the plan are displayed in an agency fund in the Comprehensive Annual Financial Report of the City.

## **11. RELATED PARTIES**

Included in 1995 and 1994 operating revenues are sales of water and electricity to departments within the City of \$46,315 and \$48,784, respectively. These intergovernmental sales include revenues of \$4,859 and \$4,560, respectively, for water delivered without charge to certain City departments. An amount equal to these water sales is charged to operation and maintenance expense in accordance with provisions of the Charter of the City.

During fiscal 1994 the San Francisco Public Utilities Commission transferred all responsibility for maintaining and repairing San Francisco Municipal Railway ("MUNI") overhead lines to the MUNI from



HH. As HH remains the funding source for such maintenance, HH transferred \$7,538 to MUNI during each of the years ended June 30, 1995 and 1994.

## 12. COMMITMENTS AND CONTINGENCIES

HH has contracted with Pacific Gas and Electric ("PG&E") to provide HH with backup power should HH be unable to generate power sufficient to meet the minimum amounts of power guaranteed under certain long-term contracts. The PG&E agreement allows PG&E to review past billings paid by HH and retroactively adjust these payments. During fiscal year 1995 and 1994, HH purchased \$15,639 and \$27,896, respectively, of power from PG&E to meet the minimum power supply requirements under its contracts.

At June 30, 1995, the SFWD and HH have outstanding commitments with third parties of approximately \$4,251 for various capital projects and \$14,577 for materials and services.

In addition, SFWD and HH are involved in various lawsuits, claims, and disputes, which are normal to SFWD's and HH's operations. In the opinion of management, the costs that might be incurred, if any, would not materially affect SFWD's or HH's financial position or operations.

## 13. ASSET TRANSFER TO SAN FRANCISCO MUNICIPAL RAILWAY

In November 1993, the voters of the City passed Proposition M, which amended the City Charter to transfer all the powers and duties with respect to San Francisco Municipal Railway (MUNI) to the newly created Public Transportation Commission. Prior to the passage of Proposition M, HH maintained jurisdiction over certain facilities, equipment and materials and supplies beneficial to MUNI operations. Proposition M required that these assets be transferred to MUNI by July 1, 1994.

The following HH assets were transferred to MUNI on July 1, 1994:

Equipment	\$ 57,321
Buildings	17,618
Accumulated depreciation	<u>(20,893)</u>
Net fixed assets	54,046
Construction in progress	408
Materials and supplies	<u>1,891</u>
Total	<u>\$ 56,345</u>

In accordance with HH's depreciation policy, a full year's depreciation expense related to the transferred assets was recorded in fiscal year 1995.

\* \* \* \* \*



SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT ( A Component of  
the City and County of San Francisco, California)

SUPPLEMENTAL SCHEDULE - COMBINING BALANCE SHEET  
JUNE 30, 1995 (In thousands)

ASSETS	Water Department	Hetch Hetchy Project	Combined
<b>UTILITY PLANT:</b>			
Water	\$ 577,396	\$ 112,297	\$ 689,693
Power		123,604	123,604
Joint water and power		140,531	140,531
Construction in progress	<u>17,620</u>	<u>9,364</u>	<u>26,984</u>
Total utility plant	595,016	385,796	980,812
Less accumulated depreciation and amortization	(204,553)	(181,398)	(385,951)
Net utility plant	<u>390,463</u>	<u>204,398</u>	<u>594,861</u>
<b>RESTRICTED ASSETS:</b>			
Equity in deposits and investments of the City			
Treasurer	23,945		23,945
Deposits in escrow	970		970
Investments held by trustee	108,634		108,634
Interest receivable	<u>1,566</u>		<u>1,566</u>
Total restricted assets	<u>135,115</u>	-	<u>135,115</u>
<b>CURRENT ASSETS:</b>			
Cash	98	20	118
Equity in deposits and investments of the City			
Treasurer	39,941	37,048	76,989
Receivables:			
Water and power	11,274	4,762	16,036
Interest and other	<u>1,226</u>	<u>469</u>	<u>1,695</u>
Total receivables	<u>12,500</u>	<u>5,231</u>	<u>17,731</u>
Materials and supplies - at average cost	<u>2,446</u>	<u>220</u>	<u>2,666</u>
Total current assets	<u>54,985</u>	<u>42,519</u>	<u>97,504</u>
<b>TOTAL ASSETS</b>	<b><u>\$ 580,563</u></b>	<b><u>\$ 246,917</u></b>	<b><u>\$ 827,480</u></b>

(Continued)



SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT (A Component of  
the City and County of San Francisco, California)

SUPPLEMENTAL SCHEDULE - COMBINING BALANCE SHEET  
JUNE 30, 1995 (In thousands)

	Water Department	Hetch Hetchy Project	Combined
<b>EQUITY AND LIABILITIES</b>			
<b>EQUITY:</b>			
Contributed capital	\$ 75		\$ 75
Retained earnings	<u>267,513</u>	<u>\$240,752</u>	<u>508,265</u>
Total equity	<u>267,588</u>	<u>240,752</u>	<u>508,340</u>
<b>LONG-TERM DEBT:</b>			
General obligation bonds	4,675		4,675
Revenue bonds	<u>269,742</u>		<u>269,742</u>
Total long-term debt	<u>274,417</u>	-	<u>274,417</u>
<b>OTHER LONG-TERM LIABILITIES:</b>			
Accrued vacation, sick leave and workers' compensation	5,646	1,283	6,929
Damage and claims liability	<u>2,793</u>	<u>498</u>	<u>3,291</u>
Contract retention in escrow (payable from restricted assets)	970		970
Revenue bonds interest (payable from restricted assets)	<u>2,832</u>		<u>2,832</u>
Total other long-term liabilities	<u>12,241</u>	<u>1,781</u>	<u>14,022</u>
<b>CURRENT LIABILITIES:</b>			
General obligation bonds	1,115		1,115
Revenue bonds	<u>5,435</u>		<u>5,435</u>
Accounts payable	4,180	2,774	6,954
Accrued payroll	<u>1,619</u>	<u>420</u>	<u>2,039</u>
Accrued vacation, sick leave, and workers' compensation	2,909	640	3,549
Bond interest payable	71		71
Retentions due contractors	939	417	1,356
Suburban water rate agreement	<u>5,939</u>		<u>5,939</u>
Damage and claims liability	2,750		2,750
Deposits and construction advances	1,304	74	1,378
Other	<u>56</u>	<u>59</u>	<u>115</u>
Total current liabilities	<u>26,317</u>	<u>4,384</u>	<u>30,701</u>
<b>TOTAL LIABILITIES</b>	<u>312,975</u>	<u>6,165</u>	<u>319,140</u>
<b>TOTAL EQUITY AND LIABILITIES</b>	<u>\$580,563</u>	<u>\$246,917</u>	<u>\$827,480</u>

(Concluded)



SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT (A Component of  
the City and County of San Francisco, California)

SUPPLEMENTAL SCHEDULE - COMBINING STATEMENT OF OPERATIONS  
YEAR ENDED JUNE 30, 1995 (In thousands)

	Water Department	Hetch Hetchy Project	Elimination	Combined
<b>OPERATING REVENUES:</b>				
Water sales	\$ 103,403	\$ 17,858	\$ (17,442)	\$ 103,819
Electricity sales		74,429		74,429
Rental income	4,001	106		4,107
Service installation income	<u>1,911</u>			<u>1,911</u>
Total operating revenues	<u>109,315</u>	<u>92,393</u>	<u>(17,442)</u>	<u>184,266</u>
<b>OPERATING EXPENSES:</b>				
Purchased energy and water	17,442	15,639	(17,442)	15,639
Transmission and distribution	16,831	11,929		28,760
Operations and maintenance	29,446	4,816		34,262
General and administrative	21,817	12,150		33,967
Depreciation and amortization	16,927	8,988		25,915
Property taxes	<u>2,111</u>	<u>994</u>		<u>3,105</u>
Total operating expenses	<u>104,574</u>	<u>54,516</u>	<u>(17,442)</u>	<u>141,648</u>
<b>OPERATING INCOME</b>	<u>4,741</u>	<u>37,877</u>	<u>-</u>	<u>42,618</u>
<b>NONOPERATING REVENUES (EXPENSES):</b>				
Interest income	11,359	1,378		12,737
Interest expense	(18,625)	(1)		(18,626)
Gain on sale of utility plant	38	19		57
Other	<u>1,930</u>	<u>117</u>		<u>2,047</u>
Net nonoperating revenues (expenses)	<u>(5,298)</u>	<u>1,513</u>	<u>-</u>	<u>(3,785)</u>
<b>INCOME BEFORE OPERATING TRANSFERS</b>	<u>(557)</u>	<u>39,390</u>	<u>-</u>	<u>38,833</u>
<b>OPERATING TRANSFERS:</b>				
Tax support transfers from the City	2,494		(573)	1,921
General fund transfers to the City	(2,634)	(26,283)	573	(28,344)
Operating transfers to Municipal Railway		<u>(7,538)</u>		<u>(7,538)</u>
Total operating transfers	<u>(140)</u>	<u>(33,821)</u>	<u>-</u>	<u>(33,961)</u>
<b>NET INCOME (LOSS)</b>	<u>\$ (697)</u>	<u>\$ 5,569</u>	<u>\$ -</u>	<u>\$ 4,872</u>



SAN FRANCISCO WATER DEPARTMENT AND  
 HETCH HETCHY PROJECT (A Component of  
 the City and County of San Francisco, California)

SUPPLEMENTAL SCHEDULE - COMBINING STATEMENT OF EQUITY  
 YEAR ENDED JUNE 30, 1995 (In thousands)

	Contributed Capital	Retained Earnings	Total
<b>SAN FRANCISCO WATER DEPARTMENT:</b>			
Equity, July 1, 1994	\$ 75	\$ 268,210	\$ 268,285
Net income	_____	(697)	(697)
Equity, June 30, 1995	75	267,513	267,588
<b>HETCH HETCHY PROJECT:</b>			
Equity, July 1, 1994	44,132	247,396	291,528
Net income		5,569	5,569
Residual equity transfer	(42,950)	(13,395)	(56,345)
Depreciation on fixed assets acquired with capital grants and contributions	(1,182)	1,182	_____
Equity, June 30, 1995	-	240,752	240,752
<b>COMBINED EQUITY, JUNE 30, 1995</b>			
	\$ 75	\$ 508,265	\$ 508,340









PUBLIC UTILITIES COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO

**ANNUAL REPORT  
Fiscal Year, 1995-96**



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# **PUBLIC UTILITIES COMMISSION**

**City and County of San Francisco**

## **Annual Report**

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**Willie L. Brown, Jr., Mayor**

**Anson B. Moran, General Manager**

### **Commissioners:**

**Marion E. Otsea, President**

**E. Dennis Normandy**

**Robert K. Werbe**

**Victor G. Makras**

**Henry E. Berman (Jan-March, 1996)**

**Romaine A. Boldridge, Secretary**



The Honorable Public Utilities Commission  
City and County of San Francisco  
1155 Market St., 4<sup>th</sup> Floor  
San Francisco CA, 94103

December 12, 1996

Dear Members:

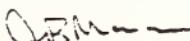
The Annual Report of the Public Utilities Commission for fiscal year ended June 30, 1996, is attached. The most significant occurrence during the year was the reorganization of the Water Department in August 1995 creating separate divisions of Water Supply & Treatment and Water Quality. This was in response to the California Department of Health Services citation for water quality violations due to high turbidity in March 1995. This citation pointed out several problems that needed corrective actions to be taken in the areas staff training, additional staffing at several facilities, additional water quality monitoring, and rehabilitation of facilities and monitoring systems. The Commission approved increased funding to address all of these areas.

In addition the reorganization jump started the long range capital and financial planning efforts that resulted in first drafts to be completed by year-ended.

In May 1996, the FERC settlement was agreed upon that called for us to pay the Modesto and Turlock Irrigation Districts a total of \$3.5 million annually to release our share of increased water releases from their excess water supply.

We have also implemented the many changes in the ways we provide water service to our 2.3 million customers. This has enabled us to meet our water supply obligations. Our shift in focus on greater advanced planning reaped benefits in this year, but the future holds many exciting challenges and prospects.

Respectfully submitted;



Anson B. Moran  
General Manager



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4. City Distribution Division
5. Hetch Hetchy Water and Power
7. PUC Bureaus
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## **Water Department**

The San Francisco Water Department serves a population of 2.3 million people, providing water to residential, commercial, industrial, governmental and wholesale customers in the San Francisco Bay region. In Fiscal Year 1995-96 the Department delivered 88,534 acre feet of water to its 166,000 retail customers in and adjacent to the City and 182,429 acre feet to its 30 wholesale customers in San Mateo, Santa Clara and Alameda counties.

### **Conservation:**

- Replaced 9,200 toilets through rebate program and city Ordinance # 392-90.
- SF Housing Authority and the Water Department inspected 1,354 housing units and found approximately 27% had high leakage and were corrected saving the authority \$26,000 annually.
- A "Water Festival" was held by the Conservation Section for 1,600 of the City's third and fourth graders. The Festival included presentations by 90 environmental professionals from environmental groups, city department and federal agencies
- A 36" by 24" map of Hetch Hetchy Water System was created by Phil Frank, a cartoonist for the San Francisco Chronicle in order to further educate both elementary students and SFWD's customers.

### **Environmental:**

- SFWD continued its program of replenishment of Lake Merced water levels during the fiscal year. This involved introducing five million gallons of water per day for a month long period into the lake, staging the water deliveries around the nesting patterns of local bird populations and raising the lake level on a temporary basis by two feet, once in the spring and again in mid summer.

### **Training and Technology:**

- Studies were completed in the area of meter reading that will result in applications during the succeeding fiscal year. The first study dealt with automated route management systems and implementation will allow for an optimization of meter reading routes. The second study looked at the use of automated meter reading (AMR) applications for hard-to-read meters and large commercial accounts and resulted in an ongoing pilot study with five AMR system manufacturers.
- Customer billing was converted to a bulk mail automated bar code mail service, which allows for a lower postage rates, estimated to save \$55,000 per annum.
- Programming changes implemented involving the remittance processing system resulted in additional billing payments being processed daily and increasing daily deposits by \$100-200,00.



## **Water Supply and Treatment**

### **Operations and Maintenance:**

- Inspected 15.7 miles of transmission pipelines, 22 services with a total of 28 meters were built and 7 concrete service vaults were constructed.
- Fabricated pump pedestals for emergency disinfection stations and repaired roofs and vent screens at Crystal Springs Balancing reservoir.
- Remodeled various parts of the Water Quality laboratory, installed and repiped hypo tanks at the Harry Tracy Plant and reconstructed various wash systems for several filters at the Sunol Plant.
- The Cathodic Protection System began a systematic program of repairing and reactivating twenty-seven rectifiers, which had been off-line.

### **Watershed Management:**

- Commission identified the Preferred Alternative for Sunol Valley, which influenced a decision to launch the Sunol Valley Management Plan in June 1995.
- Use was made of the San Francisco Conservation Corps to plant 20 acres of watershed land along Skyline Blvd.
- Fencing was replaced adjacent to the Golden Gate National Reservation Area and across the Highway 92 causeway on the Peninsula watershed.
- A contract was awarded for the Alameda Creek Diversion Dam Maintenance Project.
- The Feral Pig Control Program continued and more than 100 feral pigs were removed.
- The proposal of the watershed Helicopter Surveillance program was drafted.



## **Water Quality**

- Over \$1,000,000 has been spent on follow-up studies concerning the March 1995 Sunol Valley Water Treatment Plant treatment failures
- California Department of Health Services (DHS) granted "filtration avoidance" status for the Hetch Hetchy Aqueduct.
- Water treatment studies and operations were successfully conducted using the SFPUC Mobile Pilot Plant.
- Approximately 5,500 separate microbiological and chemical analyses were completed and reported in monthly filtration avoidance reports to DHS and Environmental Protection Agency (EPA), that verified the continuing exceptional quality of the water supply.
- The Cross-Connection Control administered 5, 738 backflow prevention device tests and inspected 378 new installations.
- 404 consumer water quality complaints were responded to within the targeted one-day response time.
- The Laboratory performed over 150,000 separate analytical tests on source and treated waters that ensured compliance with all applicable water quality regulations throughout the PUC service area.
- New Quality Assurance plan, Chemical Hygiene Plan, and Standard Operating Procedures were completed and implemented. Other procedures were also updated.
- Participated in the Partnership For Safe Drinking Water, a voluntary program where utilities investigate treatment operations to determine where water quality improvements can be made without significant capital expenditures).



## **City Distribution Division**

The City Distribution Division stores, distributes and delivers water directly to customers in San Francisco. The Division also maintains the water distribution system within the City, which consists of reservoirs and auxiliary tanks, pumping stations and a network of approximately 1,250 miles of pipelines. On average, the Division delivers approximately 80 million gallons of water a day to more than 755,300 people within the City. During the year the division also assumed operating responsibility for the drinking water system located on Treasure Island. During the course of the fiscal year, the following major operations and maintenance activities occurred in the City:

- 7.2 miles of distribution mains were replaced, approximately 830 services were replaced about 100 main breaks were repaired.
- Fire protection was improved in the Bernal Heights area and a costly pump station was decommissioned. Stand-by power and remote data monitoring was provided to the McLaren Pump water quality was continued on an on-going basis, and maintenance on over 500 pieces of equipment was performed.



## Hetch Hetchy Water and Power

The Hetch Hetchy Water and Power Division is responsible for more than 85 percent of San Francisco's water supply and for the generation of electricity from that resource. Approximately one third of the electricity is used by the City's municipal customers (e.g., the Municipal Railway, the Recreation and Parks Department, the Port, City hospitals, street lighting, the Moscone Center, and the water and sewer utilities). The balance of the power is sold to other publicly owned utilities, such as the Modesto and Turlock Irrigation Districts. The Hetch Hetchy Project consists of reservoirs, hydroelectric power plants, aqueducts, pipelines and transmission lines. This system carries water and power from the Sierra Nevada more than 165 miles to customers in San Francisco and the Bay Area.

### The 1995/96 Water Year

Hetch Hetchy went into water year 95/96 after a wet year. Water year 94/95 had 195% of normal runoff. Storage levels in both the Hetch Hetchy System and the Bay Area facilities ended that year at 1,807,000 acre-feet (123% of historic averages).

Water year 95/96 turned out to be an above average year, on record. The runoff in that period was 126% of normal. Overall reservoir storage levels reached their maximum capacity through the year. The conservative reservoir operating plans developed as a consequence of the reduction of the project's firm yield during the 1987-92 drought resulted in reservoir levels high enough to carry us through the year without rationing. Because we chose to draw down Cherry Reservoir for scheduled maintenance on the Cherry-Eleanor Pumps, the total system storage at the end of the year was only 92% of historic averages, at 1,350,000 acre-feet.

### Financial Results for FY 95/96

Hetch Hetchy's operating budget for 95-96 of \$92.5 million increased approximately 4%, or 3.3 million over 1994-95. The capital program was budgeted at \$12.4 million. Revenues to support the Department's total expenditures included: \$74 million from the sale of power, \$17.4 million from the sale of water, \$5.2 million from the unappropriated fund balance and \$1.6 million from interest and miscellaneous revenues.

### Significant Events

#### Power Revenue Enhancement Study

Under the proposals for electric utility deregulation it became apparent that retail electric rates would fall in the future. Hetch Hetchy revenues are tied to retail electric rates and therefore Hetch Hetchy net revenues would fall after the January 1, 1998 scheduled initiation of a deregulated electric utility industry. While the level of decline cannot be predicted with certainty, it is clear that net revenues available for transfer to the General Fund will fall by at least \$10 million in a "business as usual" scenario. Hetch Hetchy conducted a study of options available to protect the Hetch Hetchy transfer to the General Fund. The initial results did not yield many options that could provide significant increases in net revenues consistent with a municipality's inability to accept risks to the General Fund.



### Municipalization

A preliminary electrical power supply municipalization study was begun in response to a request from the Board of Supervisors. A contractor was selected for an expedited review and analysis of the subject.

### Yosemite National Park Activities

Under the Raker Act Hetch Hetchy pays for maintenance of roads and trails created in conjunction with the construction of the Hetch Hetchy Project and for the protection of water quality related values in the watershed. Annually, Hetch Hetchy pays Yosemite National Park (YNP) approximately \$1.2 million to fund ongoing U.S. National Park Service (U.S.N.P.) personnel in the conduct of these activities.

Hetch Hetchy also funds related capital projects on an as needed basis. In FY 94/95 severe rainstorms in Yosemite National Park caused over \$1 million in damage to the Hetch Hetchy access road. In addition Hetch Hetchy initiated a \$3.5 million capital program to replace and extend the sewage collection system in Tuolumne Meadows. While there has never been any evidence of sewage from these facilities entering the Tuolumne River or Hetch Hetchy Reservoir, there was abundant evidence that the old system suffered massive in-leakage from snow melt each spring. The City undertook to rebuild the system to prevent any perception or actual potential for contamination of the City's drinking water in the Hetch Hetchy Reservoir.

### Energy Conservation

The 95/96 fiscal year saw some major accomplishments and changes for the Bureau of Energy Conservation. The Bureau saved the City approximately \$5 million through its past and present energy conservation programs. Energy saved in FY 95/96 prevented 15,000 tons of CO<sub>2</sub> and 25 tons of NO<sub>x</sub> from polluting the air. The Energy Bureau began developing three new programs during the year; a large-scale retrofit program, an incentives program, and a sustainable municipal building design program. Four new people joined the staff bringing the total number of the Bureau's employees to ten. The Energy Bureau's new projects, and programs implemented in FY95/96 will result in a total estimated lifetime savings of \$2.2 million. The Bureau's past and present programs will result in a total estimated lifetime savings of \$65 million.



## **PUC Bureaus**

### **Finance Bureau**

The Bureau of Finance provides all financial support to divisions and bureaus in the PUC. The bureau's functions include development and monitoring of annual operating and capital budgets, preparation of monthly and annual financial statements, development of projections of water and sewer revenues, and determination of wholesale and retail water and sewer rates.

### **Systems Planning and Regulatory Compliance Bureau**

The Systems Planning and Regulatory Compliance Bureau is responsible for developing medium and long range plans for maintaining and improving water quality, water supply, and wastewater treatment. These plans are used to identify capital and operation improvements that are needed to ensure the PUC complies with federal and state laws and regulations. The bureau also monitors and provides accountability for the regulatory compliance efforts of the various utilities.

### **Utilities Engineering Bureau**

The Utilities Engineering Bureau provides engineering and construction management services to the operating divisions for their capital improvement programs. The bureau assesses the condition of PUC facilities, recommends necessary repairs or upgrades, and then designs the facility improvements to meet operating needs within schedule and budgetary constraints.

### **Management Information Systems Bureau**

The Bureau of Management Information Systems provides data processing, computer systems development and office automation services to all of the PUC divisions and bureaus. The bureau maintains and improves computer systems for processing water and sewer billing data, vehicle maintenance data, and payroll and other financial data. To support these and other functions, the bureau operates a central computer center 24 hours a day, 7 days a week. In addition, the bureau maintains a computer network of more than 500 microcomputers installed throughout the various PUC locations.

### **Bureau of Personnel and Training**

The Bureau of Personnel and Training provides services related to human resource and payroll management, and acts as the liaison with the Department of Human Resources, the Civil Service Commission, and the Controller's Payroll Services Division. The Bureau's functions include classification, examination, payroll position control, labor relations, disciplinary matters, affirmative action and equal opportunity compliance, training and general personnel administration.



## **Commercial and Land Management Bureau**

The Bureau of Commercial Land Management manages the PUC's commercial interest in lands and properties owned and occupied by PUC operations. The bureau monitors lease and permit negotiations, insurance renewals, delinquent rent collections, property taxes, and assessments. Bureau staff also recommends policies to the PUC and implements procedures approved by the PUC relating to land use, rental, management, and disposal of properties under its control. The bureau seeks to identify means of increasing revenues by developing innovative uses of pipeline rights-of-way, treatment facilities, and watershed properties in a manner consistent with the main goals of the PUC.



## **FINANCIAL STATEMENTS**



SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT  
(a component unit of the City and County of San Francisco)

**C O N T E N T S**

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Combined Financial Statements as of and for the years ended June 30, 1997 and 1996:	
Combined Balance Sheets	F-2-3
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Supplemental Schedules as of and for the year ended June 30, 1997:	
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Combining Statement of Equity	F-23



## REPORT OF INDEPENDENT ACCOUNTANTS

The Honorable Ed Harrington, Controller  
City and County of San Francisco:

We have audited the accompanying combined financial statements of the San Francisco Water Department (the SFWD) and Hetch Hetchy Project (HH), a component unit of the City and County of San Francisco, California (the City) as of June 30, 1997 and 1996 and for the years then ended, listed in the foregoing table of contents. These combined financial statements are the responsibility of the management of the SFWD and HH. Our responsibility is to express an opinion on these combined financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such combined financial statements present fairly, in all material respects, the financial position of the SFWD and HH at June 30, 1997 and 1996, and the results of its operations and cash flows for the years then ended in conformity with generally accepted accounting principles.

Our audit was conducted for the purpose of forming an opinion on the combined financial statements taken as a whole. The supplemental schedules listed in the foregoing table of contents are presented for the purpose of additional analysis and are not a required part of the combined financial statements. These schedules are the responsibility of the management of the SFWD and HH. Such schedules have been subjected to the auditing procedures applied in our audit of the combined financial statements and, in our opinion, are fairly stated in all material respects when considered in relation to the combined financial statements taken as a whole.

Coopers & Lybrand L.L.P.

Yano + Associates

San Francisco, California  
October 31, 1997



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**COMBINED BALANCE SHEETS**

**June 30, 1997 and 1996**  
**(dollars in thousands)**

ASSETS	1997	1996
<b>Current assets:</b>		
Cash	\$ 124	\$ 118
Equity in deposits and investments of the City Treasurer	114,218	102,735
<b>Receivables:</b>		
Water and power (net of allowance for doubtful accounts of \$1,000 in 1997 and \$143 in 1996)	15,540	18,063
Interest and other	2,693	2,060
Total receivables	18,233	20,123
Materials and supplies - at average cost	1,787	2,029
Total current assets	<u>134,362</u>	<u>125,005</u>
<b>Restricted assets:</b>		
Equity in deposits and investments of the City Treasurer	83,738	19,750
Investments held by trustee	111,536	108,470
Interest receivable	2,353	1,095
Total restricted assets	<u>197,627</u>	<u>129,315</u>
<b>Utility plant:</b>		
Utility plant	1,006,994	979,169
Construction-in-progress	40,635	32,536
Total utility plant	<u>1,047,629</u>	<u>1,011,705</u>
Less accumulated depreciation and amortization	(438,017)	(411,497)
Net utility plant	<u>609,612</u>	<u>600,208</u>
<b>Bond issuance costs, net</b>	<u>2,162</u>	<u>2,212</u>
<b>Total assets</b>	<u>\$ 943,763</u>	<u>\$ 856,740</u>



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT  
(a component unit of the City and County of San Francisco)**  
**COMBINED BALANCE SHEETS, Continued**

June 30, 1997 and 1996

(dollars in thousands)

**LIABILITIES AND EQUITY**

	<b>1997</b>	<b>1996</b>
<b>Current liabilities:</b>		
General obligation bonds, current portion	\$ 1,285	\$ 1,220
Revenue bonds, current portion	101,950	5,780
Accounts payable	8,839	6,429
Accrued payroll	2,884	2,213
Accrued vacation, sick leave, and workers' compensation	4,446	3,953
Bond interest payable	3,319	2,714
Retention due contractors	1,032	1,029
Suburban water rate agreement	9,722	10,612
Damage and claims liability, currently payable	1,357	2,635
Deposits and construction advances	1,615	4,393
Other	1,007	356
<b>Total current liabilities</b>	<b>137,456</b>	<b>41,334</b>
<b>Other long-term liabilities:</b>		
Accrued vacation, sick leave, and workers' compensation	5,345	4,851
Damage and claims liability	1,467	1,610
Capital lease obligation	204	-
<b>Total other long-term liabilities</b>	<b>7,016</b>	<b>6,461</b>
<b>Long-term debt:</b>		
General obligation bonds	2,170	3,455
Revenue bonds	239,355	268,740
<b>Total long-term debt</b>	<b>241,525</b>	<b>272,195</b>
<b>Total liabilities</b>	<b>385,997</b>	<b>319,990</b>
<b>Commitments and contingencies (Note 12).</b>		
<b>Equity:</b>		
Contributed capital	75	75
Retained earnings - reserved for bond requirements	228,018	211,961
Retained earnings - unreserved	329,673	324,714
<b>Total equity</b>	<b>557,766</b>	<b>536,750</b>
<b>Total equity and liabilities</b>	<b>\$ 943,763</b>	<b>\$ 856,740</b>



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**COMBINED STATEMENTS OF INCOME**  
**for the years ended June 30, 1997 and 1996**  
**(dollars in thousands)**

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	1997	1996
<b>Operating revenues:</b>		
Water sales	\$ 124,147	\$ 110,464
Electricity sales	71,700	74,408
Rental income	5,422	4,293
Service installation income	2,169	1,831
	<hr/>	<hr/>
Total operating revenues	<hr/> <u>203,438</u>	<hr/> <u>190,996</u>
<b>Operating expenses:</b>		
Purchased energy	7,252	7,917
Transmission and distribution	28,546	27,177
Operations and maintenance	33,536	31,321
General and administrative	46,019	34,530
Depreciation and amortization	26,628	25,611
Property taxes	<u>1,574</u>	<u>2,191</u>
	<hr/>	<hr/>
Total operating expenses	<hr/> <u>143,555</u>	<hr/> <u>128,747</u>
<b>Operating income</b>	<hr/> <u>59,883</u>	<hr/> <u>62,249</u>
<b>Nonoperating revenues (expenses):</b>		
Interest income	11,133	6,736
Interest expense	(13,565)	(11,655)
Gain on sale of utility plant	111	107
Property tax refund	2,161	5,237
Other	<u>(1,004)</u>	<u>3,439</u>
	<hr/>	<hr/>
Net nonoperating revenues (expenses)	<hr/> <u>(1,164)</u>	<hr/> <u>3,864</u>
<b>Income before operating transfers</b>	<hr/> <u>58,719</u>	<hr/> <u>66,113</u>
<b>Operating transfers:</b>		
Operating transfer to the City and other	<u>(30,165)</u>	<u>(30,165)</u>
Operating transfer to the San Francisco Municipal Railway	<u>(7,538)</u>	<u>(7,538)</u>
	<hr/>	<hr/>
Total operating transfers	<hr/> <u>(37,703)</u>	<hr/> <u>(37,703)</u>
<b>Net income</b>	<hr/> <u>\$ 21,016</u>	<hr/> <u>\$ 28,410</u>



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**COMBINED STATEMENTS OF EQUITY**  
**for the years ended June 30, 1997 and 1996**  
**(dollars in thousands)**

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	<u>Contributed Capital</u>	<u>Retained Earnings</u>	<u>Total</u>
Equity, June 30, 1995	\$ 75	\$ 508,265	\$ 508,340
Net income	-	<u>28,410</u>	<u>28,410</u>
Equity, June 30, 1996	75	536,675	536,750
Net income	-	<u>21,016</u>	<u>21,016</u>
Equity, June 30, 1997	<u>\$ 75</u>	<u>\$ 557,691</u>	<u>\$ 557,766</u>



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**COMBINED STATEMENTS OF CASH FLOWS**  
**for the years ended June 30, 1997 and 1996**  
**(dollars in thousands)**

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	1997	1996
<b>Cash flows from operating activities:</b>		
Operating income	\$ 59,883	\$ 62,249
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation and amortization	26,628	25,611
Effect of changes in:		
' Water and power receivables, net	2,523	(2,027)
' Materials and supplies	242	637
Other receivables	(144)	(11)
Accounts payable	2,410	(525)
Accrued payroll	671	174
Other liabilities	(3,500)	3,163
Net cash provided by operating activities	<u>88,713</u>	<u>89,271</u>
<b>Cash flows from noncapital financing activities:</b>		
Operating transfers out	(37,703)	(37,703)
Other income received and property tax refund	<u>1,189</u>	<u>8,676</u>
Net cash used by noncapital financing activities	<u>(36,514)</u>	<u>(29,027)</u>
<b>Cash flows from capital and related financing activities:</b>		
Bond issuance proceeds	129,854	-
Payment of bond issue costs	(852)	-
Transfers to escrow to defease bonds	(57,012)	-
Interest paid on long-term debt	(10,928)	(10,688)
Principal paid on long-term debt	(9,225)	(6,552)
Proceeds from sale of utility plant	116	-
Acquisition of utility plant	(35,254)	(29,440)
Payment of capital lease obligations	(32)	-
Net cash provided (used) by capital and related financing activities	<u>16,667</u>	<u>(46,680)</u>
<b>Cash flows from investing activities:</b>		
Interest income received	9,677	6,853
Purchases of investments held by trustee - restricted	(28,667)	(12,713)
Receipts from maturities of investment held by trustee-restricted	<u>25,601</u>	<u>12,877</u>
Net cash provided by investing activities	<u>6,611</u>	<u>7,017</u>
Increase in cash and cash equivalents	<u>75,477</u>	<u>20,581</u>
<b>Cash and cash equivalents:</b>		
Beginning of year	<u>122,603</u>	<u>102,022</u>
End of year	<u>\$ 198,080</u>	<u>\$ 122,603</u>



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**COMBINED STATEMENTS OF CASH FLOWS, Continued**  
**for the years ended June 30, 1997 and 1996**  
**(dollars in thousands)**

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	1997	1996
<b>Reported as:</b>		
Cash	\$ 124	\$ 118
Equity in deposits and investments of the City Treasurer - restricted	83,738	19,750
Equity in deposits and investments of the City Treasurer - unrestricted	<u>114,218</u>	<u>102,735</u>
Total cash and cash equivalents, end of year	<u>\$ 198,080</u>	<u>\$ 122,603</u>
 <b>Noncash capital and related financing information:</b>		
Revenue bond interest accretion	\$ 2,206	\$ 2,038
Amortization of bond discount and issuance costs	\$ 452	\$ 529
Amortization of bond refunding loss	\$ 191	-
Acquisition of fixed assets under capital lease	\$ 288	-



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**1. Organization and Basis of Presentation:**

The San Francisco Water Department (the SFWD) was formed under the provisions of the City Charter of San Francisco. The SFWD is governed by a five-member Commission appointed by the Mayor, which determines such matters as rates and charges of services, approval of contracts, and Department policy.

The SFWD acquired the fully developed, mature water works for San Francisco on March 3, 1930. Since then, the City and County of San Francisco (the City) has operated and maintained the water works as the SFWD. The SFWD is engaged in the collection, transmission, and distribution of water and electricity to San Francisco and certain suburban areas. The Hetch Hetchy Project (HH) originated as a result of the Raker Act of 1913, which granted water and power resources rights-of-way on the Tuolumne River in Yosemite National Park to the City of San Francisco.

**Description of Reporting Entity:**

The combined financial statements include the accounts of the SFWD and HH, whose operations are interrelated. All significant interentity transactions have been eliminated. The combined entities are a component unit of the City and County of San Francisco (the City) and, as such, are included in the Comprehensive Annual Financial Report of the City as enterprise funds.

**Basis of Accounting:**

The financial activities of the SFWD and HH are accounted for on a flow of economic resources measurement focus, using the accrual basis of accounting. Under this method, all assets and liabilities associated with operations are included on the balance sheet; revenues are recorded when earned and expenses are recorded at the time liabilities are incurred.

**Use of Estimates:**

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**2. Significant Accounting Policies:**

**Utility Plant:**

Utility plant is stated at cost. Depreciation and amortization are computed by the straight-line method based on the estimated useful lives of the related assets, which range from 3 to 75 years for equipment and 3 to 173 years for facilities and improvements. No depreciation or amortization is recorded in the year of acquisition and a full year's depreciation or amortization is recorded in the year of disposal. Construction-in-progress represents the design and construction costs of various uncompleted projects.

Certain projects are constructed using the proceeds from the sale of bonds. A portion of interest costs incurred during the project construction period are capitalized as a component of project cost. Interest cost capitalized was \$493 and \$1,411 in 1997 and 1996, respectively.

**Cash and Cash Equivalents:**

Cash and cash equivalents include all highly liquid investments, including restricted assets, with an original purchased maturity of three months or less. All pooled deposits and investments of the City Treasurer are, in substance, demand deposits and are considered cash equivalents.

**Investments:**

Effective July 1, 1996, the City adopted the provisions of Governmental Accounting Standards Board (GASB) Statement No. 31, *Accounting and Financial Reporting for Certain Investments and External Investment Pools*. Adoption of this statement did not have a material impact on the SFWD's combined financial statements. GASB No. 31 requires investments to be recorded at fair value with the difference between cost and fair value recorded as an unrealized gain/loss. Investments are stated at fair value based upon quoted market prices.

**Accrued Vacation, Sick Leave, and Workers' Compensation:**

Accrued vacation pay, which may be accumulated up to ten weeks per employee, is charged to expense as earned. Unused sick leave accumulated on or prior to December 6, 1978 is vested and payable upon termination of employment by retirement, death, or disability caused by industrial accident. Sick leave earned subsequent to that date is nonvesting and may be accumulated up to six months per employee. The SFWD and HH are self-insured for workers' compensation claims and accrue the estimated cost of those claims, as well as the cost of incurred but not reported claims.



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**2. Significant Accounting Policies, continued:**

**Bond Discount and Issuance Costs:**

Bond discount and issuance costs are amortized over the term of the related bonds using the effective interest rate method.

**Damage and Claims Liability:**

The SFWD and HH are self-insured for general liability and property damage claims. The liability represents an estimate of the cost of all outstanding claims and incurred but not reported claims.

**Pensions:**

Effective July 1, 1996, the SFWD adopted GASB No. 27, *Accounting for Pensions by State and Local Government Employers* which establishes standards for the measurement, recognition and display of pension expenditures, and related liabilities, assets and note disclosures. For fiscal year ended June 30, 1997, the net pension obligation, as calculated by actuarial methods, equaled the contributions made by the SFWD.

**Revenue Recognition:**

Revenues from water and power services furnished to consumers are recorded in the combined financial statements in the period that meters are read. In general, customers are billed on a cyclical basis with large industrial customers billed monthly and all other customers bimonthly.

**Reclassifications:**

Certain reclassifications have been made to the 1996 financial statements to conform to the 1997 presentation. These reclassifications did not change total assets, liabilities, equity, or net income.



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**3. Utility Plant:**

Utility plant at June 30, 1997 and 1996 consisted of the following:

	<b>1997</b>	<b>1996</b>
Land	\$ 21,437	\$ 21,437
Equipment	65,174	60,612
Facilities and improvements	920,383	897,120
Construction-in-progress	<u>40,635</u>	<u>32,536</u>
Total	1,047,629	1,011,705
Less accumulated depreciation and amortization	<u>(438,017)</u>	<u>(411,497)</u>
Net utility plant	<u>\$ 609,612</u>	<u>\$ 600,208</u>

Depreciation and amortization expense was \$26,628 and \$25,611 in 1997 and 1996, respectively.



**SAN FRANCISCO WATER DEPARTMENT AND  
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**4. Restricted Assets:**

Certain borrowing agreements require that the SFWD and HH maintain certain restricted cash and investment balances in trust (Note 5). Restricted assets consisted of the following at June 30, 1997 and 1996:

	<b>1997</b>	<b>1996</b>
<b>Equity in deposits and investments of the City Treasurer:</b>		
1972 Bond Fund	\$ 467	\$ 440
1987 Improvement Fund	5,448	6,401
1991 Reconstruction and Replacement Fund	9,364	12,909
1996 Construction Fund	<u>68,459</u>	<u>-</u>
Total	<u>83,738</u>	<u>19,750</u>
<b>Investments held by trustee:</b>		
1987 Revenue Bond Fund	4,088	3,792
1991 Revenue Bond Fund	3,763	4,639
1992 Revenue Bond Fund	99,580	100,039
1996 Revenue Bond Fund	<u>4,105</u>	<u>-</u>
Total	<u>111,536</u>	<u>108,470</u>
<b>Interest receivable:</b>		
1972 Bond Fund	7	-
1987 Improvement Fund	210	-
1991 Reconstruction and Replacement Fund	360	-
1996 Construction Fund	<u>1,776</u>	<u>-</u>
1991 Revenue Bond Fund	-	11
1992 Revenue Bond Fund	<u>-</u>	<u>1,084</u>
Total	<u>2,353</u>	<u>1,095</u>
<b>Total restricted assets</b>	<b><u>\$197,627</u></b>	<b><u>\$129,315</u></b>



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
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**(dollars in thousands)**

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**5. Deposits and Investments:**

**Cash:**

At June 30, 1997 and 1996, the carrying amount of the SFWD's and HH's cash was \$124 and \$118, respectively with a corresponding FDIC insured bank balance of \$129 and \$91, respectively.

**Investments:**

At June 30, 1997 and 1996, the equity in deposits and investments of the City Treasurer was \$197,956 and \$122,485, respectively. Amounts held by the City are invested pursuant to policy guidelines established by the City Treasurer. The objectives of the policy are, in order of priority, preservation of capital, liquidity, and yield. The policy addresses soundness of financial institutions in which the City will deposit funds, types of investment instruments as permitted by the California Government Code, and the percentage of the portfolio which may be invested in certain instruments with longer terms to maturity. The Comprehensive Annual Financial Report of the City categorizes the level of risk associated with the City's pooled deposits and investments.

The investments below are held by the trustee in the SFWD's name. The fair value of the SFWD's investments approximates cost. At June 30, 1997 and 1996, investments held by the trustee on behalf of the SFWD included the following:

	<b>Fair Value</b>	
	<b>1997</b>	<b>1996</b>
U.S. Treasury bills	\$ 6,082	\$ 5,579
U.S. Treasury notes	102,876	100,034
Money market funds	<u>2,578</u>	<u>2,857</u>
Total	<u>\$ 111,536</u>	<u>\$ 108,470</u>

The SFWD is required by bond indenture to invest unused bond proceeds in government obligations.



**SAN FRANCISCO WATER DEPARTMENT AND  
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**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**6. Long-Term Debt:**

The SFWD's long-term debt consisted of the following at June 30, 1997 and 1996:

	<u>Interest Rates</u>	<u>Due Serially To</u>	<u>1997</u>	<u>1996</u>
General obligation bonds:				
1972 Municipal Water System Bonds	4.00% - 5.70%	2000	\$ 3,455	\$ 4,675
Less current portion of general obligation bonds			<u>(1,285)</u>	<u>(1,220)</u>
Long-term portion of general obligation bonds			<u>\$ 2,170</u>	<u>\$ 3,455</u>
Revenue Bonds:				
1987 Water Revenue Refunding Bonds	6.65% - 8.50%	1998	\$ 100,596	\$ 105,230
1991 Water Revenue Bonds	5.30% - 7.40%	2021	12,886	67,140
1992 Water Revenue Refunding Bonds	5.35% - 6.50%	2016	107,180	107,180
1996 Water Revenue Refunding Bonds	5.00% - 6.50%	2026	131,470	-
Unamortized bond discount and refunding loss			<u>(10,827)</u>	<u>(5,030)</u>
Total revenue bonds			<u>341,305</u>	<u>274,520</u>
Less current portion of revenue bonds			<u>(101,950)</u>	<u>(5,780)</u>
Long-term portion of revenue bonds			<u>\$ 239,355</u>	<u>\$ 268,740</u>

The payments of principal and interest amounts on the various bonds are collateralized by future water sale revenues.

The 1987 and 1991 Revenue Bonds include capital appreciation bonds with original principal amounts of \$13,132 and \$1,051, respectively. Interest is due only upon redemption or maturity of these capital appreciation bonds. The accrued interest is added to the principal balance. The recorded amount of the 1987 and 1991 capital appreciation bonds at June 30, 1997 was \$27,576 and \$1,585, respectively and at June 30, 1996 was \$25,476 and \$1,480, respectively.

In fiscal 1992, the SFWD issued \$107,180 of revenue bonds pursuant to a crossover refunding of 1987 Water Revenue Refunding Bonds. The proceeds were used to purchase U.S. government securities which were placed into an irrevocable trust to be used for the payment of interest on the 1992 bonds and \$460 per year of principal due on the 1987 bonds through November 1, 1997 (crossover date), at which time the remaining proceeds will be used to advance refund the 1987 bonds. The debt service requirements of the 1992 bonds after the crossover date will be made from the net revenues of the SFWD.



**SAN FRANCISCO WATER DEPARTMENT AND  
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**6. Long-Term Debt, continued:**

In fiscal 1997, the SFWD issued \$131,470 (face value) of 1996 Series A Water Revenue Bonds. A portion of the bond proceeds was designated for the purpose of refunding \$53,090 (face value) of 1991 Water Revenue Bonds which were due serially to 2020. The refunding extended maturities on the bonds in order to lower required annual payments. After payment of \$852 in issue costs, \$57,012 of the net bond proceeds was transferred to a trustee to be placed in an irrevocable trust to redeem the refunded portion of the 1991 revenue bonds. Accordingly, the refunded portion of the 1991 revenue bonds was removed from the SFWD's balance sheet. The advance refunding decreased the SFWD's total debt service payments over the next 29 years by \$2,475 and provided for an economic gain of \$4,064. The resulting accounting loss of \$5,989 has been deferred in accordance with GASB Statement No. 23, *Accounting and Financial Reporting for Refunding of Debt Reported by Proprietary Activities*, and is being amortized over the remaining life of the old debt.

Minimum future obligations on long-term debt at June 30, 1997 are as follows:

<u>Year Ending June 30</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
1998	\$ 103,235	\$ 10,246	\$113,481
1999	6,440	10,241	16,681
2000	7,415	10,200	17,615
2001	6,995	10,127	17,122
2002	7,350	6,619	13,969
Thereafter	<u>224,152</u>	<u>84,784</u>	<u>308,936</u>
Total	<u>\$355,587</u>	<u>\$132,217</u>	<u>\$487,804</u>

**7. Suburban Water Rate Agreement:**

On July 1, 1984, certain suburban customers entered into an agreement that establishes water rates to be charged to the suburban customers. In accordance with the agreement, the water rates are calculated based on a prescribed allocation of expenses and an allowed rate of return on certain water-related assets. During fiscal year 1997 and 1996, water sale revenues charged to such suburban customers were \$61,706 and \$53,154, respectively. Such amounts are subject to final review by the suburban customers based on the suburban revenue requirement calculation. The suburban revenue requirement calculation results in a receivable from or payable to the suburban customers at year-end.



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
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**8. Employees' Retirement Plan:**

**Plan Description:**

The City has a single-employer defined benefit retirement plan (the Plan) which is administered by the San Francisco City and County Employees' Retirement System (the Retirement System). The Plan covers substantially all full-time employees of the SFWD and HH along with other employees of the City. The Plan provides basic service retirement, disability, and death benefits based on specified percentages of final average salary and provides cost-of-living adjustments after retirement. The Plan also provides pension continuation benefits to qualified survivors. The San Francisco City and County Charter and Administrative Code is the authority which establishes and amends the benefit provisions and employer obligations of the Plan. The Retirement System issues a publicly available financial report that includes financial statements and required supplementary information of the Plan. That report may be obtained by writing to the San Francisco City and County Employees' Retirement System, 1155 Market Street, 2nd Floor, San Francisco, California 94103 or by calling (415) 554-1520.

**Funding Policy:**

Contributions are made to the basic plan by the SFWD, HH and their employees. Employee contributions are mandatory. Employee contribution rates for 1997 varied from 7.5% to 8% as a percentage of covered salary. The SFWD and HH are required to contribute at an actuarially-determined rate. The SFWD and HH contribution rates for 1997 as a percentage of covered payroll were approximately .93%. The SFWD and HH contributions to the San Francisco City and County Employees' Retirement System for the years ended June 30, 1997, 1996, and 1995 were \$359, \$1,685, and \$2,152, respectively, equal to the required contributions for the year.

**9. Health Care Benefits:**

Health care benefits for employees, retired employees and surviving spouses (beneficiaries) are financed by beneficiaries and by the City through the Health Service System of the City. The contributions for all of the City Fund groups is determined by charter provision based on similar contributions made by the 10 most populous counties in California. The City's postretirement health care benefit contributions are recognized when incurred. The costs to SFWD and HH for the years ended June 30, 1997 and 1996 were \$2,085 and \$2,707, respectively, including \$732 and \$683, respectively, to provide post-retirement health care benefits for retired employees. The City's liability for postretirement health care benefits is limited to its annual contribution.



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**10. Deferred Compensation Plan:**

The City offers its employees, including the SFWD and HH employees, a deferred compensation plan created in accordance with Internal Revenue Code (IRC) Section 457. The plan, available to all City employees, permits them to defer a portion of their salary until future years. The deferred compensation is not available to employees until retirement, termination, or certain other covered events.

As required by IRC Section 457, all amounts of compensation deferred under the plan, all property and rights purchased with those amounts, and all income attributable to those amounts (until paid or made available to the employer or other beneficiary) remain the property of the City, subject only to the claims of the City's general creditors. Participants' rights under the plan are equal to those of general creditors of the City in an amount equal to the fair market value of the deferred account for each participant. Amounts deferred under the plan are displayed in an agency fund in the Comprehensive Annual Financial Report of the City.

**11. Related Parties:**

Included in 1997 and 1996 operating revenues are sales of power to departments within the City of \$42,455 and \$41,669, respectively. Sales of water delivered without charge to certain City departments of \$5,032 and \$5,120, respectively, are not included in operating revenues.

During 1995, the San Francisco Public Utilities Commission (the Commission) transferred all responsibility for maintaining and repairing the San Francisco Municipal Railway (MUNI) overhead lines to the MUNI from HH. As HH remains the funding source for such maintenance, HH transferred \$7,538 to the MUNI during each of the years ended June 30, 1997 and 1996.

Effective July 1, 1996, the Commission assumed responsibility for certain overhead costs previously incurred by the individual departments under its control. These costs are now allocated back to the SFWD, HH and the Clean Water Department. For the year ended June 30, 1997 the Commission allocated \$10,446 in overhead expenses to the SFWD and HH.

**12. Commitments and Contingencies:**

HH has contracted with Pacific Gas and Electric (PG&E) to provide HH with backup power, services and transmission should HH be unable to generate power sufficient to meet the minimum amounts of power guaranteed under certain long-term contracts. The PG&E agreement allows PG&E to review past billings paid by HH and retroactively adjust these payments to actual backup power charges as finally determined by PG&E. During fiscal years 1997 and 1996, HH purchased \$11,258 and \$12,143, respectively, of power, backup and transmission services.



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**12. Commitments and Contingencies, continued:**

In order to comply with Federal Energy Regulatory Commission regulations, HH has contracted with the Modesto and Turlock Irrigation Districts to meet quality and depth of water standards on the Tuolumne River. Under this agreement, HH is obligated to pay \$3,570 annually through 2001 for services rendered. In addition, HH is required to pay 52% of environmental monitoring costs, not to exceed \$1,400, and to provide approximately \$750 over 20 years for habitat and facility improvements.

At June 30, 1997, the SFWD and HH have outstanding commitments with third parties of approximately \$15,235 for various capital projects and \$6,145 for materials and services.

In addition, the SFWD and HH are involved in various lawsuits, claims, and disputes, which are normal to the SFWD's and HH's operations. In the opinion of management, the costs that might be incurred, if any, would not materially affect the SFWD's or HH's financial position or results of operations.

**13. Risk Management:**

The SFWD and HH are self-insured for general liabilities, property damage and workers' compensation claims. The risk of loss is managed internally by setting aside assets for claim settlement and recording an estimate of the cost of all outstanding claims and incurred but not reported claims as liabilities. Claim liabilities are recorded when it is probable that a loss has occurred and the amount of loss can be reasonably estimated. Liabilities include an amount for claims that have been incurred but not reported. Because actual claim liabilities depend on such complex factors as inflation, changes in legal doctrines, and damage awards, the process used in computing claim liabilities does not necessarily result in an exact amount and, therefore, it is reasonably possible that claim liabilities could change in the future. Claim liabilities are reevaluated periodically to take into consideration recently settled claims, the frequency of claims, and other economic and social factors. The liability is the SFWD and HH's best estimate based on available information. Changes in the reported liability for the years ended June 30, 1997 and 1996 resulted from the following:

	<b>1997</b>	<b>1996</b>
Beginning of year liability	\$ 6,433	\$ 10,378
Current year claims and changes in estimates	14	(2,103)
Current year claims payments	<u>(1,193)</u>	<u>(1,842)</u>
End of the year liability	<u><u>\$ 5,254</u></u>	<u><u>\$ 6,433</u></u>
Consisting of general liabilities and property damage	\$ 2,824	\$ 4,246
Workers' compensation	<u>2,430</u>	<u>2,187</u>
	<u><u>\$ 5,254</u></u>	<u><u>\$ 6,433</u></u>



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**14. Property Tax Refund:**

Included in nonoperating revenues for the years ended June 30, 1997 and 1996 was \$2,161 and \$5,237, respectively, representing a refund of property tax paid in previous years to the cities of Alameda and San Mateo, following partial settlement relating to Proposition 13.

**15. Subsequent Event:**

On November 4, 1997, the voters of San Francisco approved the issuance of \$304,000 of Water Revenue Bonds. The SFWD anticipates that these bonds will be sold over a three-year period beginning with \$100,000 in the spring of 1998. The interest rates and maturity dates have not yet been determined.



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**SUPPLEMENTAL SCHEDULE - COMBINING BALANCE SHEET**

June 30, 1997

(dollars in thousands)

ASSETS	San Francisco Water Department	Hetch Hetchy Project	Combined
<b>Current assets:</b>			
Cash	\$ 104	\$ 20	\$ 124
Equity in deposits and investments of the City Treasurer	<u>61,517</u>	<u>52,701</u>	<u>114,218</u>
<b>Receivables:</b>			
Water and power (net of allowance for doubtful accounts of \$1,000 in 1997 and \$143 in 1996)	11,247	4,293	15,540
Interest and other	1,608	1,085	2,693
Total receivables	<u>12,855</u>	<u>5,378</u>	<u>18,233</u>
Materials and supplies - at average cost	1,536	251	1,787
Total current assets	<u>76,012</u>	<u>58,350</u>	<u>134,362</u>
<b>Restricted assets:</b>			
Equity in deposits and investments of the City Treasurer	83,738		83,738
Investments held by trustee	111,536		111,536
Interest receivable	2,353		2,353
Total restricted assets	<u>197,627</u>	<u>-</u>	<u>197,627</u>
<b>Utility plant</b>			
Construction-in-progress	617,390	389,604	1,006,994
Total utility plant	<u>26,805</u>	<u>13,830</u>	<u>40,635</u>
Less accumulated depreciation and amortization	(241,486)	(196,531)	(438,017)
Net utility plant	<u>402,709</u>	<u>206,903</u>	<u>609,612</u>
<b>Bond issuance costs, net</b>			
Total assets	<u>\$ 678,510</u>	<u>\$ 265,253</u>	<u>\$ 943,763</u>



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**SUPPLEMENTAL SCHEDULE - COMBINING BALANCE SHEET, Continued**  
**June 30, 1997**  
**(dollars in thousands)**

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EQUITY AND LIABILITIES	San Francisco Water Department	Hetch Hetchy Project	Combined
<b>Current liabilities:</b>			
General obligation bonds	\$ 1,285		\$ 1,285
Revenue bonds	101,950		101,950
Accounts payable	5,699	\$ 3,140	8,839
Accrued payroll	2,387	497	2,884
Accrued vacation, sick leave, and workers' compensation	3,348	1,098	4,446
Bond interest payable	3,319		3,319
Retentions due contractors	778	254	1,032
Suburban water rate agreement	9,722		9,722
Damage and claims liability	1,273	84	1,357
Deposits and construction advances	1,426	189	1,615
Other	482	525	1,007
<b>Total current liabilities</b>	<b>131,669</b>	<b>5,787</b>	<b>137,456</b>
<b>Other long-term liabilities:</b>			
Accrued vacation, sick leave and workers' compensation	4,212	1,133	5,345
Damage and claims liability	1,306	161	1,467
Capital lease obligation		204	204
<b>Total other long-term liabilities</b>	<b>5,518</b>	<b>1,498</b>	<b>7,016</b>
<b>Long-term debt:</b>			
General obligation bonds	2,170		2,170
Revenue bonds	239,355		239,355
<b>Total long-term debt</b>	<b>241,525</b>	<b>-</b>	<b>241,525</b>
<b>Total liabilities</b>	<b>378,712</b>	<b>7,285</b>	<b>385,997</b>
<b>Equity:</b>			
Contributed capital	75		75
Retained earnings - reserved for bond requirements	228,018		228,018
Retained earnings - unreserved	71,705	257,968	329,673
<b>Total equity</b>	<b>299,798</b>	<b>257,968</b>	<b>557,766</b>
<b>Total equity and liabilities</b>	<b>\$ 678,510</b>	<b>\$ 265,253</b>	<b>\$ 943,763</b>



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
 (a component unit of the City and County of San Francisco)  
**SUPPLEMENTAL SCHEDULE - COMBINING STATEMENT OF INCOME**  
**June 30, 1997**  
**(dollars in thousands)**

	<u>San Francisco Water Department</u>	<u>Hetch Hetchy Project</u>	<u>Eliminations</u>	<u>Combined</u>
<b>Operating revenues:</b>				
Water sales	\$ 123,623	\$ 19,561	\$ (19,037)	\$ 124,147
Electricity sales		71,700		71,700
Rental income	5,181	241		5,422
Service installation income	2,169			2,169
<b>Total operating revenues</b>	<b>130,973</b>	<b>91,502</b>	<b>(19,037)</b>	<b>203,438</b>
<b>Operating expenses:</b>				
Purchased energy and water	19,037	7,252	(19,037)	7,252
Transmission and distribution	18,084	10,462		28,546
Operations and maintenance	27,676	5,860		33,536
General and administrative	25,455	20,564		46,019
Depreciation and amortization	18,866	7,762		26,628
Property taxes	1,225	349		1,574
<b>Total operating expenses</b>	<b>110,343</b>	<b>52,249</b>	<b>(19,037)</b>	<b>143,555</b>
<b>Operating income</b>	<b>20,630</b>	<b>39,253</b>		<b>59,883</b>
<b>Nonoperating revenues (expenses):</b>				
Interest income	7,894	3,239		11,133
Interest expense	(13,565)			(13,565)
Gain on sale of utility plant	85	26		111
Other revenues	548	609		1,157
<b>Net nonoperating revenues (expenses)</b>	<b>(5,038)</b>	<b>3,874</b>		<b>(1,164)</b>
<b>Income before operating transfers</b>	<b>15,592</b>	<b>43,127</b>		<b>58,719</b>
<b>Operating transfers:</b>				
General fund transfers to the City		(30,165)		(30,165)
Operating transfer to Municipal Railway		(7,538)		(7,538)
<b>Total operating transfers</b>		<b>(37,703)</b>		<b>(37,703)</b>
<b>Net income</b>	<b>\$ 15,592</b>	<b>\$ 5,424</b>	<b>-</b>	<b>\$ 21,016</b>



**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**SUPPLEMENTAL SCHEDULE - COMBINING STATEMENT OF EQUITY**  
**June 30, 1997**  
**(dollars in thousands)**

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	<u>Contributed Capital</u>	<u>Retained Earnings</u>	<u>Total</u>
<b>San Francisco Water Department:</b>			
Equity, July 1, 1996	\$75	\$284,131	\$284,206
Net income }	—	15,592	15,592
Equity, June 30, 1997	<u>\$75</u>	<u>\$299,723</u>	<u>\$299,798</u>
 <b>Hetch Hetchy Project:</b>			
Equity, July 1, 1996	—	\$252,544	\$252,544
Net income	—	5,424	5,424
Equity, June 30, 1997	<u>—</u>	<u>\$257,968</u>	<u>\$257,968</u>
Combined equity, June 30, 1997	<u>\$75</u>	<u>\$557,691</u>	<u>\$557,766</u>







SAN FRANCISCO PUBLIC UTILITIES COMMISSION



ANNUAL REPORT FISCAL YEAR 1996-1997





## PUBLIC UTILITIES COMMISSION

CITY AND COUNTY OF SAN FRANCISCO

1155 Market Street, 4th Floor • San Francisco, CA 94103

Tel. (415) 554-3155 • FAX (415) 554-3161

Willie L. Brown, Jr.  
*Mayor*Anson B. Moran  
*General Manager*

## COMMISSIONERS

Victor G. Makras

*President*

Ann Moller Caen

*Vice President*

E. Dennis Normandy

Robert K. Werbe

Frank L. Cook

December 1, 1997

## DOCUMENTS DEPT.

MAY 11 2000

SAN FRANCISCO  
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Honorable Willie L. Brown, Mayor

Honorable Board of Supervisors

Dear Mayor Brown and Members of the Board:

In accordance with Section 4.103 of the Charter, I am forwarding the Annual Report for the Public Utilities Commission for Fiscal Year 1996-97.

In April this year the City came into compliance with all of the requirements of its wastewater discharge permit. This follows 20 years of investment by the City, the State and the Federal Governments of over \$1.5 billion on the construction of a system to control overflows of untreated wastewater and upgrade of treatment plants.

Implementing decisions of the Commission, the Water Supply & Treatment Division and the Water Quality Bureau refined operating procedures. The coming year will see the start of design work for the upgrade of the Sunol Water Treatment Plant. These changes will result in meeting conditions imposed by the regulatory agencies.

In April, the Navy transferred the maintenance and operation of all the utilities (power, water and sewers) on Treasure Island to the PUC. Much of the infrastructure is old and in need of repair. Staff are using the time prior to full base transfer to do an assessment of the condition of the system to identify and prioritize the improvements.

The PUC reached agreement with P G & E on a number of disputed issues including the turnover of various municipal accounts and the assignment of a large industrial customer to Hetch Hetchy. This has increased the annual revenues by approximately \$8 million.

I am glad to report that in May the Commission maintained water and sewer rates at the 1995/96 levels. This is the first time, in over a decade, that a zero/zero has been achieved. I am also happy to report that the PUC's land leases and permits earned over \$5 million in revenue to the City during the year, reducing the City ratepayer's burden.

Sincerely,

Victor G. Makras  
President



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## PUC FINANCIAL STATEMENTS

SAN FRANCISCO WATER DEPARTMENT AND HETCH HETCHY PROJECT  
COMBINED FINANCIAL STATEMENTS as of and for the years ended June  
30, 1997 and 1996

CITY AND COUNTY OF SAN FRANCISCO CLEAN WATER PROGRAM  
FUND GROUP FINANCIAL STATEMENTS June 30, 1997 and 1996



# INTRODUCTION

The San Francisco Public Utilities Commission (PUC) oversees three of the City's municipal utilities:

- 1 The Hetch Hetchy Project, which consists of water supply and power generating facilities in the Sierra Nevada;
- 2 The water treatment and distribution system, which delivers some of the purest drinking water in California to more than 2.3 million customers in the Bay Area; and
- 3 The wastewater treatment and disposal system, which collects and treats sewage and stormwater flows within San Francisco.

Each of these three utilities represents a separate enterprise within the PUC with an independent financial report. Four divisions are responsible for the operation of the utilities.

The PUC's utility system begins in the Sierra Nevada, where the Hetch Hetchy Water and Power Division maintains three reservoirs and more than 650 acres of watershed, much of it located in Yosemite National Park. Water from the reservoirs is conveyed through a series of tunnels and pipelines from the mountains and across the Central Valley. En route, the water passes through four powerhouses, generating electricity for the City's municipal load and other customers.

At Tesla Portal in the East Bay, the Water Supply and Treatment Division takes over. In addition to Hetch Hetchy water, the Water Supply and Treatment Division draws another 15 percent of the total water supply from five reservoirs located in the East Bay and on the Peninsula. Water from these local sources is treated at two plants before it is delivered to Bay Area customers.

At the San Francisco border, the City Distribution Division assumes responsibility for storage and final delivery to San Francisco customers. The Division maintains eleven reservoirs and eight storage tanks within the City, and uses a series of pump stations and more than 1,200 miles of water mains to reach every elevation and corner of the City.

## PUC Mission:

*To serve San Francisco and its Bay Area customers with reliable, high quality and affordable water while maximizing benefits from power operations and responsibly managing the resources entrusted to its care.*

*To protect public health and the aquatic environment by providing safe, reliable and efficient collection, treatment and disposal of San Francisco's wastewater.*

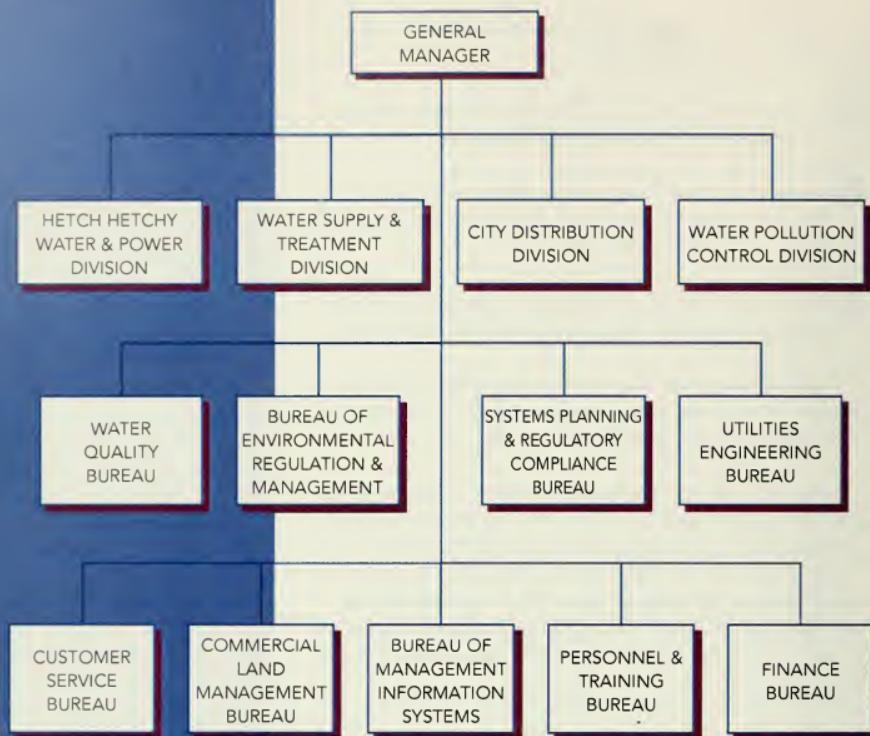
*To conduct its business affairs in a manner that promotes efficiency, minimizes waste and assures rate payer confidence.*

*To promote diversity and the health, safety and professional development of its employees.*



**Hetch Hetchy Reservoir near Yosemite provides water for 2.3 million people in the Bay Area.**

# Public Utilities Commission



Finally, the City's wastewater discharges and stormwater runoff are captured by a system of more than 900 miles of sewers and storm drains. The Water Pollution Control Division maintains the wastewater collection system and operates three treatment plants, where chemical and biological treatment processes are used to remove pollutants before the wastewater is discharged into the San Francisco Bay and the Pacific Ocean.

In addition to these four operating divisions, there are nine bureaus that provide technical and administrative support services. This approach eliminates duplication of effort and contributes to more efficient operations.

In 1996-97, the PUC assumed leadership for the Clean Water Program, the City's wastewater treatment and disposal system. This represents a significant expansion in the PUC's responsibilities, while offering opportunities for consolidation and cost-savings among the utilities. The PUC has already achieved savings by consolidating laboratory and customer service functions, and expects more savings in the future.

This annual report highlights the operations and accomplishments of the four divisions and nine bureaus. It also identifies some of the challenges ahead for the PUC, including implementation of a major capital improvement program and expansion into new service areas. ■

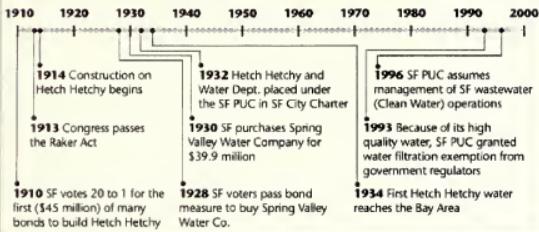


Secondary Clarifiers, Southeast Water Pollution Control Plant



San Francisco Public Utilities Commission  
System Map

## Significant SF PUC Historical Dates



Hetch Hetchy



Hetch Hetchy

Cherry Power Tunnel

Hetch Hetchy Reservoir

Canyon Power Tunnel

Moccasin Reservoir

Priest Reservoir



Moccasin Powerhouse

# HETCH HETCHY WATER AND POWER DIVISION

The Hatch Hatchy Water and Power Division is responsible for more than 85 percent of San Francisco's water supply and for the generation of electricity from that resource. Approximately one third of the electricity is used by the City's municipal customers (e.g., the Municipal Railway, the Recreation and Parks Department, the Port, City hospitals, street lighting, the Moscone Center, and the water and sewer utilities). The balance of the power is sold to other publicly owned utilities, such as the Modesto and Turlock Irrigation Districts. The Hatch Hatchy Project consists of reservoirs, hydroelectric power plants, aqueducts, pipelines, and transmission lines. This system carries water and power from the Sierra Nevada more than 165 miles to customers in San Francisco and the Bay Area.



Moccasin Powerhouse

Hatch Hatchy operates as two related but separate water systems and associated power components. The primary system diverts domestic water from the Hatch Hatchy Reservoir to the Water Supply and Treatment Division through the Kirkwood and Moccasin Power Plants. The second system diverts water from Lake Lloyd and Lake Eleanor to the Don Pedro Reservoir through the Holm Power Plant. Water impounded in the Don Pedro Reservoir satisfies the Raker Act entitlements of the Modesto and Turlock Irrigation Districts while allowing greater flexibility in use of domestic water from the Hatch Hatchy Reservoir.

Electric power generated at the four power plants is conveyed through approximately 165 miles of high voltage transmission lines to delivery points for the Modesto and Turlock Irrigation Districts, and through an interconnection with Pacific Gas and Electric's (PG&E) system for transmission to San Francisco for municipal purposes.

## Impounding Reservoirs

	Hetch Hatchy	Lake Eleanor	Lake Lloyd
Watershed (sq. mi.)	459	79	114
Capacity (mil. gal.)	117,400	8,830	87,600
Capacity (acre feet)	360,360	27,100	268,800

## HIGHLIGHTS FROM 1996-97

The Hetch Hetchy Water and Power Division had a number of significant events in 1996-97, a year that "came in like a lion and went out like a lamb," from a water resources perspective:

**Water Year** — Between December 29, 1996, and January 5, 1997, a series of warm Pacific storms struck central California and brought heavy precipitation to the mountain watersheds. During this eight-day period, Hetch Hetchy Reservoir received nearly 10 inches of precipitation while Lake Lloyd received more than 19 inches. These record-setting inflows caused all three mountain reservoirs to spill. As a result, most of the direct runoff from the storms passed through the system and was not retained for future use. Subsequently, between February and May, the area experienced the driest spring on record. At the end of the runoff period, the water year was only two percent above normal.

**New Years Storm Damage** — The massive inflows that resulted from the New Years storms caused more than \$10 million in damages to Hetch Hetchy property. High water flooded the Holm powerhouse and knocked it out of service for more than a week. Roads and bridges were damaged, and access to the Hetch Hetchy Reservoir was cut off by slides. In addition, water deliveries from Hetch Hetchy had to be shut off for a month because of the high turbidity caused by the excessive runoff. During this time, the entire water system demand was met with water resources from local reservoirs on the Peninsula and in the East Bay.

**Increased Municipal Load** — During the year, the City reached agreement with PG&E on a number of disputed issues. In particular, PG&E agreed that a number of municipal and large industrial customers would be turned over to Hetch Hetchy Water and Power. Power sales to these customers are projected to produce net revenues of approximately \$37 million over the next four-and-a-half years.

**Electric Utility Deregulation** — Hetch Hetchy Water and Power continued to plan for deregulation in the electric utility industry, the first phase of which will go into effect on January 1, 1998. During negotiations on industry restructuring, the City

Powerhouses/Maximum Capacity (Megawatts)	
Holm	165 MW
Kirkwood	122 MW
Moccasin	115 MW
Moccasin Lowhead	3 MW
	405 MW

prevented implementation of a proposal that would have increased electric service costs in San Francisco by as much as \$15 to \$20 million a year, virtually eliminating any savings that would otherwise result from deregulation.

## LOOKING FORWARD

In the coming year, utility deregulation will continue to present a challenge to Hetch Hetchy Water and Power, especially as customers are given the ability to buy power on the open market. The division will continue aggressive negotiations to protect the interests of San Francisco customers.

The division is also preparing for the potential effects of El Niño, and the prospects of a very wet, as well as a very dry year. Going into the year, all of the reservoirs are below target storage level, to allow for potentially heavy runoff. At the same time, the water bank is full, to mitigate against a very dry year. The division has established emergency response procedures to handle storm events and is coordinating its efforts with other divisions within the PUC. ■



Bay Division Pipelines

# WATER SUPPLY AND TREATMENT DIVISION

The Water Supply and Treatment Division assumes responsibility for water from Hetch Hetchy at the Tesla Portal in Alameda County. From there, the water is conveyed through four pipelines to customers located in Alameda, Santa Clara and San Mateo Counties, as well as to San Francisco. The Division provides another 15 percent of the total water supply from reservoirs located in the East Bay and on the Peninsula. These local water sources require filtration and treatment at two plants. In 1996-97, the Water Supply and Treatment Division delivered on average 250 million gallons per day (MGD) to customers throughout the service area.

## HIGHLIGHTS FROM 1996-97

The Division conducted a number of activities in five major areas in the course of the year. The most significant accomplishments are summarized below.

**Watershed Management** — eradicated 400 feral pigs (1/3 of estimated population); reduced grazing activity by 40 percent and removed drift fences to promote dispersion of cattle away from water courses; reduced fire hazards by removing storm-damaged trees and other combustible materials; improved erosion control by planting seedlings; demolished abandoned buildings and structures to eliminate unsanitary conditions threatening water quality; replaced security fencing to prevent trespassing and encroachment.



Sunol Water Treatment Plant

### Water Supply and Treatment operations:

- *Two reservoirs in Alameda County — Calaveras and San Antonio — and three reservoirs on the Peninsula — Crystal Springs, San Andreas and Pilarcitos — with a total capacity of 244,000 acre-feet of water;*
- *Water treatment facilities including the Sunol Valley Water Treatment Plant (160 MGD maximum capacity), the Harry Tracy Water Treatment Plant (160 MGD), the Thomas Shaff/Tesla Portal disinfection station, and the Polbemus chemical feed station;*
- *Transmission facilities consisting of 203 miles of transmission pipelines, 12 miles of tunnels, and five pump stations;*
- *Watershed lands including 40,000 acres (60 square miles) in the Alameda Creek Watershed and 23,000 acres (36 square miles) on the San Francisco Peninsula; and*
- *Approximately 150 miles of right-of-way property.*

## **Productivity Task Force**

### ***The Water Supply and Treatment***

*Division has created a Productivity Task Force to identify areas where the division can increase the efficiency and effectiveness of the operation and maintenance of the water treatment facilities. The Task Force is investigating productivity improvements such as scheduling, cross-training, information management, preventive maintenance, and supervision.*

**Facility Improvements** — modified the treatment process at Sunol to enhance flocculation and sedimentation; modified the chemical feed system at Harry Tracy; installed back-up power in the event of emergencies at Harry Tracy; installed remote controls for the Thomas Shaft disinfection station; inspected and repaired 19 miles of transmission pipelines; initiated a valve exercising and maintenance program, which is intended to operate, inspect, and maintain each valve in the transmission system every two years.

**Right-of-Way Maintenance** — implemented a geographic information system (GIS) to map right-of-way property and monitor land and water resource conditions; inspected 30 miles to identify encroachments, obstacles, and conditions that threaten pipeline operations; issued access permits.

**Operations Planning** — developed a Policies, Procedures, and Training Workplan to satisfy a Department of Health Services (DHS) compliance order; prepared an operations plan for the two treatment plants and disinfection facilities, also in response to DHS orders; in conjunction with the Bay Area Water Users Association and DHS, implemented an Emergency Operations and Notification Plan.

**Communications** — conducted a number of public outreach activities to convey the importance of protecting and preserving watersheds; implemented a state-of-the-art digital communications system to improve communications throughout the service area.

## **LOOKING FORWARD**

In the coming year, the Water Supply and Treatment Division will continue the initiatives started in 1996-97, as well as several new efforts:

- Increased construction activities at the two treatment plants must be managed while maintaining water treatment and delivery capabilities;
- A preventive maintenance assessment will be used to develop a proactive program;
- More aggressive right-of-way management will improve resource protection and utilization;
- A completed Watershed Management Plan will guide land use decisions. ■

# CITY DISTRIBUTION DIVISION

The City Distribution Division stores, distributes and delivers water directly to customers in San Francisco. The Division also maintains the water distribution system within the City, which consists of reservoirs and auxiliary tanks, pumping stations and a network of approximately 1,250 miles of pipelines. On average, the Division delivers approximately 80 million gallons of water a day to more than 755,300 people within the City. During the year the division also assumed operating responsibility for the drinking water system located on Treasure Island.

The City Distribution Division conducts a range of services:

- ▶ Provide 24 hour-a-day response capability for water main breaks and for pumping and pressurizing the water distribution system;
- ▶ Respond to all multiple-alarm fires to assure sufficient water pressure and supply for fire suppression;

## San Francisco Water Distribution System Components

*8 storage tanks*

*10 pump stations*

*11 reservoirs*

*440 million gallons storage capacity*

*1,250 miles of pipeline*

*15,000 distribution valves*

*167,000 metered services*



Reservoirs and pumping stations in San Francisco. The water system in San Francisco consists of over 1,200 miles of pipe, the distance between San Francisco and Denver.

### Storage Capacity of In-City Reservoirs

(millions of gallons)

Sunset	176.7
University Mound	140.9
Sutro	31.4
Summit	14.0
College Hill	13.5
Stanford Heights	12.9
Merced Manor	9.5
Lombard	2.7
Hunter's Point	1.1
Polkero Heights	1.0

- Maintain and repair 1,250 miles of water mains;
- Install, repair and maintain services connecting individual customers to water mains;
- Identify underground leaks;
- Landscape maintenance of 984 acres of division land, including rights-of-way, reservoirs, open space and parks.

### **HIGHLIGHTS FROM 1996-97**

The City Distribution Division completed the following activities in 1996-97:

**Water Main Repair and Replacement** — as part of the continuous water main repair and replacement program, the division replaced 28,000 linear feet of water mains. The division also made the following types of repairs:

► Main breaks	103
► Connections	119
► Main extensions and relocations	5
► Steel main leaks	5
► Cut in new gate services	10

**Service Renewals** — water services connect individual customers with the City's water mains. The division is responsible for connecting new customers, maintaining and replacing deteriorated services, and installing new meters:

► New services	176
► Service renewals	698
► Meter installations	7,242
► Service maintenance	7,368

**Meter Replacement** — the division has an on-going program to monitor and replace the more than 167,000 meters that measure the amount of water delivered to each customer. Accurate meters help ensure that customers are billed properly for their water consumption. This year's meter replacement activities included:

► Set	719	► Scrap	6,399
► Change	7,149	► Special test	1,073
► Repair	195	► Field repairs	3,152
► Home	248	► Shop changes	348

**Treasure Island** — in April, 1997, the Navy contracted with the City to maintain and operate the water distribution system serving Treasure Island and Yerba Buena Island. The system, which consists of four reservoirs and four pump stations, as well as water mains and connections, is old and in disrepair and lacks modern controls. The division undertook an assessment of the condition of the system to identify needed improvements.

## LOOKING FORWARD

The City Distribution Division intends to maintain the level of services achieved in the preceding year. In addition, the division, working with the Utilities Engineering Bureau, intends to begin much-needed repairs to reservoirs, pump stations, storage tanks, and other facilities that are reaching or have exceeded their life expectancy. ■

# WATER POLLUTION CONTROL DIVISION

## Mandate for Water Pollution Control

*In 1972, Congress passed the Clean Water Act, which set in motion a nationwide effort to clean up the nation's waterways. In response, San Francisco devised a "Master Plan for Wastewater Management" which would control overflows of untreated wastewater and upgrade the City's treatment plants. In 1997, after investing more than \$1.5 billion of federal, state, and local resources, the City is in compliance with all the requirements of its wastewater discharge permits.*

The Water Pollution Control Division operates and maintains the City's water pollution control system. The system is made up of collection sewers, transport and storage boxes, pump stations, overflow structures, treatment plants and outfalls. The division's mandate is to maximize treatment and minimize combined sewage overflows, as dictated by the discharge permits issued by the state regulatory authority.

San Francisco has a combined sewer system in which both domestic and commercial/industrial sewage as well as stormwater runoff are collected in the same sewer. As a result, the system captures and treats more wastewater to a higher level of treatment than nearly any other system in the greater Bay Area. During dry weather, the system collects, treats and discharges an average of 90 million gallons of sewage a day. When it rains, the system may collect and treat as much as 415 million gallons of combined sewage and stormwater a day.

## HIGHLIGHTS FROM 1996-97

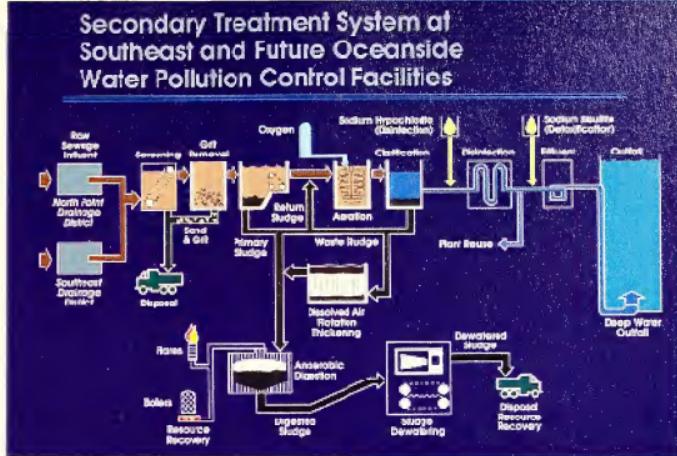
In 1996-97, management of the sewer system was consolidated under the Water Pollution Control Division within the PUC. The division is responsible for maintaining more than 900 miles of sewers, operating 20 pump stations and 3 wastewater treatment plants, identifying and implementing system repairs and improvements, and planning for future operations. Among the significant achievements in 1996-97 were the following:

**Master Plan Projects Completed —** four major projects identified in the "Master Plan for Wastewater Management" were completed, including the Richmond Transport, the Islais Creek Transport and Storage



A schematic map of the wastewater system.

Facility, the Flynn Pump Station, and reconfiguration of discharges from the Southeast Plant. The activation of these facilities brought the City into full compliance with the provisions of its wastewater discharge permit for the first time in 20 years, and increased the operational responsibility of the division.



**North Point Plant Improvements** — the first of several phases of improvements to the North Point Plant was initiated. These improvements will consolidate the treatment processes at the facility and improve the energy and operational efficiency of the plant.

**Oceanside Permit Renewed** — in April the discharge permit for the Oceanside Water Pollution Control Plant and the Westside Wet Weather Combined Sewer System was reissued. This represents the culmination of several years of negotiations with state regulators, and assures that the westside system as currently configured will continue to meet water quality standards.

**Treasure Island** — the division assumed responsibility for the wastewater system on Treasure Island, which also serves Yerba Buena Island, on a contract basis with the Navy. In addition to operating the treatment plant and associated pump stations, the division began an aggressive program to assess the wastewater system's condition and repair and replace damaged and blocked sewers.

## LOOKING FORWARD

In the coming year, the division intends to place increased emphasis on the maintenance and repair of the sewer collection system. This effort will expand the cleaning program in an effort to reduce odors and backups that could cause flooding, as well as assure compliance with discharge permits. The division is also investigating the potential impact of new developments, such as Mission Bay and the new stadiums, on the demand for wastewater treatment. ■

# PUC BUREAUS

The four operating divisions receive technical and administrative support from nine service bureaus. This approach eliminates duplication of effort and contributes to more efficient operations. One new bureau (Environmental Regulation and Management) was added as a result of the integration of the Clean Water Program. In addition, several functions have been reassigned among the bureaus to improve services to the operating divisions and, ultimately, to our customers.

## WATER QUALITY

The Water Quality Bureau is charged with ensuring that the PUC complies with all current and future water quality regulations, including the Federal Safe Drinking Water Act, the California Code of Regulations Title 22, San Francisco Ordinance 84-356 (Cross Connection Control), and parts of the Federal Clean Water Act. The bureau assures compliance through water quality sampling and analysis, process engineering, applied research and data review, field inspections, cross connection control program management, field project oversight, regulatory liaison, hazardous materials management, and laboratory testing. The bureau also responds to all customer complaints and inquiries and posts beach safety warnings after sewage overflows. Major accomplishments:

- The laboratories for the Clean Water Program were brought under the supervision of the Water Quality Bureau, providing for efficiencies and cost-savings among the utilities.
- Collected over 111,000 water samples.
- Performed over 150,000 analytical tests (organic, inorganic, metals and biological) on source and treated waters from reservoirs, pipelines, and distribution systems to assure compliance with water quality regulations for the drinking water supply.



- Conducted over 218,000 analytical tests on pretreatment samples and wastewater discharges to assure compliance with discharge permits.
- Processed 5,938 backflow prevention device tests and inspected 378 new water installations to prevent contamination of drinking water with unsanitary sources; initiated a program to assess potential for contamination of the potable water distribution system from the Fire Department's high pressure Auxiliary Water Supply System.
- Initiated the Environmental Protection Agency's (EPA) mandated Information Collection Rule project, a national data-gathering effort for preparation of future regulations; collect and test 300-400 samples per month for chemical, physical and microbiological contaminants.
- Initiated the self-assessment phase of the EPA/AWWA (American Water Works Association) Partnership for Safe Water project, with the goal of improving water treatment plant operations — particularly Cryptosporidium removal — without significant capital expenditures.
- Responded to more than 300 consumer complaints within four hours.

## ENVIRONMENTAL REGULATION AND MANAGEMENT



**Industrial Waste inspector.** San Francisco has pretreatment standards which prevent industries from discharging harmful amounts of wastes to sewers.

The Bureau of Environmental Regulation and Management is responsible for regulating industrial waste discharges to the sewer system, implementing the sewer user charge program, and assisting the operating divisions in complying with environmental protection and industrial health and safety laws and regulations. When this new bureau became part of the PUC, it also assumed responsibility for the health and safety program for the entire department. Major accomplishments:

- Effective management of the pretreatment program has helped assure that there were no up-set or pass-through violations at the wastewater treatment plants.

- Developed and implemented an outreach program to San Francisco dentists, geared toward lowering harmful discharges to the sewer system.
- Implemented the Confined Space Entry Program and trained affected employees.
- Developed and published the first PUC Supervisor Safety Handbook and trained all first and second line supervisors.
- Developed hazardous materials business plans for 12 PUC facilities to bring them into compliance with federal requirements.
- Provided the PUC's response to the requirements of the San Francisco Integrated Pest Management Ordinance.

*The PUC's Bureau of Environmental Regulation and Management received the National Public Education Achievement Award from the Association of Metropolitan Sewerage Agencies for its outstanding Water Pollution Prevention Program and was recognized for being innovative, progressive, and multilingual.*

## SYSTEMS PLANNING AND REGULATORY COMPLIANCE

The Systems Planning and Regulatory Compliance Bureau is responsible for developing medium and long range plans for maintaining and improving water quality, water supply, and wastewater treatment. These plans are used to identify capital and operational improvements that are needed to ensure the PUC's utilities comply with federal and state laws and regulations. The bureau also monitors and provides accountability for the regulatory compliance efforts of the various utilities. Major accomplishments:

- **Water Supply Master Plan** — completed the scoping phase of a larger effort to identify the water supply needs of San Francisco and its suburban customers in the next 50 years, and how those needs can be met. The full study will take an additional two years to complete.
- **Water Treatment Plant Improvement Projects** — completed the preliminary engineering and commenced work on the conceptual engineering for improvements to the two water treatment plants (Sunol Valley and Harry Tracy), which will bring these plants into compliance with new regulations and improve the protection of public health.

**The Capital Improvement Program for the water system is estimated to cost \$2.36 billion:**

**Water quality = \$542 million (23%)**

**System reliability = \$1,596 million (67%)**

**Water supply = \$225 million (10%)**



- **Capital Improvement Program** — completed the first comprehensive assessment of the capital improvement needs of the water system over the next ten years; this report identified needed improvements of more than \$2.3 billion for system reliability, water quality, and water supply.

- **Wastewater Master Plan** — with activation of the Islais Creek Transport and Storage Facility in March, 1997, the Clean Water Program fully complies with its discharge permits for the first time in 20 years; San Francisco is one of the first cities in the country with a combined sewer system to complete its comprehensive wastewater management program.

## UTILITIES ENGINEERING

The Utilities Engineering Bureau provides engineering and construction management services to the operating divisions for their capital improvement programs. The bureau assesses the condition of PUC facilities, recommends necessary repairs or upgrades, then designs the facility improvements to meet operating needs within schedule and budgetary constraints. In 1996-97, the bureau was responsible for \$75 million in capital improvements to PUC facilities. Major accomplishments include:

- Design and construction of emergency repairs to PUC facilities damaged during the floods of January 1997, \$14 million;
- Completion of Phase 1 design for the Supervisory Control and Data Acquisition (SCADA) system, a remote monitoring and control system for water distribution facilities, \$4.4 million;
- Construction of sewer improvements in Tuolumne Meadows to protect the Hetch Hetchy water supply, \$4.3 million;
- Repairs to the face and structural elements of Eleanor Dam, which impounds snowmelt from the Sierra Nevada, \$3.2 million;

- Completion of the second project to repair and replace deteriorated pipeline supports along two of the Bay Division pipelines, \$1.7 million;
- Design and construction of the San Joaquin Pipeline Crossovers, including installation of new valves, to allow continued operation during planned shutdowns of each of the three Central Valley pipelines, \$1.5 million;
- Design of ductile iron water main replacements for several major areas of the City, including the shopping district along Fillmore Street, and 24th Street through Noe Valley and the Mission neighborhoods, \$1 million;
- Construction of the North Airport Pipeline to replace an undersized, deteriorated water line serving San Francisco International Airport, \$650,000.

## CUSTOMER SERVICE

The Customer Service Bureau is the primary point of contact within the PUC for water and sewer customers. The bureau maintains the 144,381 residential and 22,944 commercial and municipal accounts in San Francisco. It provides for billing and collection of water and sewer charges; administration of customer accounts (including opening and closing accounts); installation of new services; meter reading; and field services, such as inspections. The bureau oversees the ultra-low flow toilet rebate and give-away programs and administers a water conservation "best management practices" program.

The bureau is also responsible for public information programs for water and sewer construction projects, and serves as an ombudsman for water and sewer complaints. Among its public information functions is developing and scheduling public information programs, administering a PUC speaker's bureau, and preparing publications, such as the semi-annual Water Quality Report and billing inserts.



*The Bureau initiated a Customer Service Improvement Task Force comprised of multi-disciplined volunteers from throughout the bureau; the Task Force generated a number of recommendations for improving services to customers, many of which have been and continue to be initiated.*

Many of the bureau's 1996-97 activities were aimed at making the bureau more customer oriented, as illustrated by these highlights:

- Extended high bill inspection services to include Saturdays and weekday evenings until 10 p.m.;
- Established a medically sensitive delinquency collection and shut-off process that balances revenue collection with the special needs of customers with serious medical conditions;
- Created an emergency response package to help customers locate water shutoff valves, secure water heaters, and maintain an emergency water supply;
- Increased public outreach efforts through public meetings, leafleting in advance of neighborhood construction activities, and an ombudsman program to research and resolve problems related to water and sewer services;
- Improved meter reading capabilities through a new route management system and a pilot program investigating automated meter reading systems, and immediate notification of customers with higher-than-normal meter readings about potential leaks;
- Continued water conservation efforts through conservation inspections and ultra-low flow toilet distribution programs to residential customers.

## COMMERCIAL LAND MANAGEMENT

The Bureau of Commercial Land Management manages the PUC's commercial interest in lands and properties owned and occupied by PUC operations. The bureau monitors lease and permit negotiations, insurance renewals, delinquent rent collections, property taxes, and assessments. Bureau staff also recommend policies to the PUC and implement procedures approved by the PUC relating to land use, rental, management, and disposal of properties under its control. The bureau seeks to identify means of increasing revenues by developing innovative uses of pipeline rights-of-way, treatment facilities, and watershed properties in a

manner consistent with the main goals of the PUC. Highlights:

- Negotiated 30 new leases;
- Issued 20 permits.

## MANAGEMENT INFORMATION SYSTEMS

The Bureau of Management Information Systems provides data processing, computer systems development and office automation services to all of the PUC divisions and bureaus. The bureau maintains and improves computer systems for processing water and sewer billing data, vehicle maintenance data, and payroll and other financial data. To support these and other functions, the bureau operates a central computer center 24 hours a day, 7 days a week. In addition, the bureau maintains a computer network of more than 500 micro computers installed throughout the various PUC locations. In 1996-97, the bureau made the following improvements in the PUC computerized systems:

- All engineering staff received modern computing equipment capable of handling the specialized software used for engineering projects;
- Computer Aided Design and Drafting (CADD) facilities were expanded to improve drafting and design capabilities of PUC engineers;
- The Computerized Maintenance Management System (CMMS) was expanded by automating the administrative tasks associated with facilities and equipment maintenance at the water treatment plants and maintenance yard.



## PERSONNEL AND TRAINING

The Bureau of Personnel and Training provides services related to human resource and payroll management, and acts as the liaison with the Department of Human Resources, the Civil Service Commission, and the Controller's Payroll Services Division. The bureau's functions include classification, examination, payroll, position control, labor relations, disciplinary matters, affirmative

action and equal opportunity compliance, training, and general personnel administration. In 1996-97, the bureau was instrumental in processing the transfer of more than 500 employees of the Clean Water Program into the PUC. This year's highlights:

- Review of more than a dozen agreements with labor unions and bargaining units representing PUC employees, and implementation of various premium and special pay provisions contained in those agreements;
- Initiation of a project to evaluate and implement a new automated time collection system;
- Classification of 39 new positions;
- Administration of 14 examinations and 46 provisional recruitments;
- Processing and appointment of 200 permanent and provisional employees;
- Participation in city-wide negotiations with 18 major bargaining units.

## FINANCE

The Bureau of Finance provides all financial support to divisions and bureaus in the PUC. The bureau's functions include development and monitoring of annual operating and capital budgets, preparation of monthly and annual financial statements, development of projections of water and sewer revenues, and determination of wholesale and retail water and sewer rates. Financial highlights:

- Completed a refunding of \$56 million in outstanding debt that resulted in a \$6.1 million savings in interest expense over the remaining life of the bonds; issued \$75 million in new long-term debt to fund water system capital projects.
- Instituted a cross-training program for all finance functions and developed a policies and procedures manual.

- Reorganized the accounting staff to provide a functional organization structure.
- Restructured the budget development process, using a summary spreadsheet that incorporates the three utility budgets and identifies new programs being recommended for the coming fiscal year.
- Completed an overhead study of the PUC's charges to capital projects and modified the overhead allocation system.

Each year, the Bureau of Finance prepares audited financial statements for the three utilities. The appendices to this report provide a combined financial statement for the San Francisco Water Department and the Hetch Hetchy Project for 1996-97, and a separate financial statement for the Clean Water Program Fund Group. ■





**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(A Component Unit of the City and County of San Francisco)**

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**COMBINED FINANCIAL STATEMENTS**  
**as of and for the years ended June 30, 1997 and 1996**



SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT  
(a component unit of the City and County of San Francisco)

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REPORT OF INDEPENDENT ACCOUNTANTS

The Honorable Ed Harrington, Controller  
City and County of San Francisco:

We have audited the accompanying combined financial statements of the San Francisco Water Department (the SFWD) and Hetch Hetchy Project (HH), a component unit of the City and County of San Francisco, California (the City) as of June 30, 1997 and 1996 and for the years then ended, listed in the foregoing table of contents. These combined financial statements are the responsibility of the management of the SFWD and HH. Our responsibility is to express an opinion on these combined financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such combined financial statements present fairly, in all material respects, the financial position of the SFWD and HH at June 30, 1997 and 1996, and the results of its operations and cash flows for the years then ended in conformity with generally accepted accounting principles.

Our audit was conducted for the purpose of forming an opinion on the combined financial statements taken as a whole. The supplemental schedules listed in the foregoing table of contents are presented for the purpose of additional analysis and are not a required part of the combined financial statements. These schedules are the responsibility of the management of the SFWD and HH. Such schedules have been subjected to the auditing procedures applied in our audit of the combined financial statements and, in our opinion, are fairly stated in all material respects when considered in relation to the combined financial statements taken as a whole.

*Coopers & Lybrand L.L.P.*

San Francisco, California  
October 31, 1997

*Yano + Associates*

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**

**COMBINED BALANCE SHEETS**

June 30, 1997 and 1996  
(dollars in thousands)

---

ASSETS	1997	1996
<b>Current assets:</b>		
Cash	\$ 124	\$ 118
Equity in deposits and investments of the City Treasurer	<u>114,218</u>	<u>102,735</u>
<b>Receivables:</b>		
Water and power (net of allowance for doubtful accounts of \$1,000 in 1997 and \$143 in 1996)	15,540	18,063
Interest and other	<u>2,693</u>	<u>2,060</u>
Total receivables	<u>18,233</u>	<u>20,123</u>
Materials and supplies - at average cost	<u>1,787</u>	<u>2,029</u>
Total current assets	<u>134,362</u>	<u>125,005</u>
<b>Restricted assets:</b>		
Equity in deposits and investments of the City Treasurer	83,738	19,750
Investments held by trustee	<u>111,536</u>	<u>108,470</u>
Interest receivable	<u>2,353</u>	<u>1,095</u>
Total restricted assets	<u>197,627</u>	<u>129,315</u>
<b>Utility plant:</b>		
Utility plant	1,006,994	979,169
Construction-in-progress	<u>40,635</u>	<u>32,536</u>
Total utility plant	<u>1,047,629</u>	<u>1,011,705</u>
Less accumulated depreciation and amortization	<u>(438,017)</u>	<u>(411,497)</u>
Net utility plant	<u>609,612</u>	<u>600,208</u>
Bond issuance costs, net	<u>2,162</u>	<u>2,212</u>
Total assets	<u>\$ 943,763</u>	<u>\$ 856,740</u>

The accompanying notes are an integral part of these financial statements.

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
(a component unit of the City and County of San Francisco)  
**COMBINED BALANCE SHEETS, Continued**  
June 30, 1997 and 1996  
(dollars in thousands)

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LIABILITIES AND EQUITY	1997	1996
<b>Current liabilities:</b>		
General obligation bonds, current portion	\$ 1,285	\$ 1,220
Revenue bonds, current portion	101,950	5,780
Accounts payable	8,839	6,429
Accrued payroll	2,884	2,213
Accrued vacation, sick leave, and workers' compensation	4,446	3,953
Bond interest payable	3,319	2,714
Retentions due contractors	1,032	1,029
Suburban water rate agreement	9,722	10,612
Damage and claims liability, currently payable	1,357	2,635
Deposits and construction advances	1,615	4,393
Other	1,007	356
<b>Total current liabilities</b>	<b>137,456</b>	<b>41,334</b>
<b>Other long-term liabilities:</b>		
Accrued vacation, sick leave, and workers' compensation	5,345	4,851
Damage and claims liability	1,467	1,610
Capital lease obligation	204	-
<b>Total other long-term liabilities</b>	<b>7,016</b>	<b>6,461</b>
<b>Long-term debt:</b>		
General obligation bonds	2,170	3,455
Revenue bonds	239,355	268,740
<b>Total long-term debt</b>	<b>241,525</b>	<b>272,195</b>
<b>Total liabilities</b>	<b>385,997</b>	<b>319,990</b>
<b>Commitments and contingencies (Note 12).</b>		
<b>Equity:</b>		
Contributed capital	75	75
Retained earnings - reserved for bond requirements	228,018	211,961
Retained earnings - unreserved	329,673	324,714
<b>Total equity</b>	<b>557,766</b>	<b>536,750</b>
<b>Total equity and liabilities</b>	<b>\$ 943,763</b>	<b>\$ 856,740</b>

The accompanying notes are an integral part of these financial statements.

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**COMBINED STATEMENTS OF INCOME**  
**for the years ended June 30, 1997 and 1996**  
**(dollars in thousands)**

---

	<b>1997</b>	<b>1996</b>
<b>Operating revenues:</b>		
Water sales	\$ 124,147	\$ 110,464
Electricity sales	71,700	74,408
Rental income	5,422	4,293
Service installation income	2,169	1,831
<b>Total operating revenues</b>	<b>203,438</b>	<b>190,996</b>
<b>Operating expenses:</b>		
Purchased energy	7,252	7,917
Transmission and distribution	28,546	27,177
Operations and maintenance	33,536	31,321
General and administrative	46,019	34,530
Depreciation and amortization	26,628	25,611
Property taxes	1,574	2,191
<b>Total operating expenses</b>	<b>143,555</b>	<b>128,747</b>
<b>Operating income</b>	<b>59,883</b>	<b>62,249</b>
<b>Nonoperating revenues (expenses):</b>		
Interest income	11,133	6,736
Interest expense	(13,565)	(11,655)
Gain on sale of utility plant	111	107
Property tax refund	2,161	5,237
Other	(1,004)	3,439
<b>Net nonoperating revenues (expenses)</b>	<b>(1,164)</b>	<b>3,864</b>
<b>Income before operating transfers</b>	<b>58,719</b>	<b>66,113</b>
<b>Operating transfers:</b>		
Operating transfer to the City and other	(30,165)	(30,165)
Operating transfer to the San Francisco Municipal Railway	(7,538)	(7,538)
<b>Total operating transfers</b>	<b>(37,703)</b>	<b>(37,703)</b>
<b>Net income</b>	<b>\$ 21,016</b>	<b>\$ 28,410</b>

The accompanying notes are an integral part of these financial statements.

**SAN FRANCISCO WATER DEPARTMENT AND**  
**HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**COMBINED STATEMENTS OF EQUITY**  
**for the years ended June 30, 1997 and 1996**  
**(dollars in thousands)**

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	<u>Contributed Capital</u>	<u>Retained Earnings</u>	<u>Total</u>
Equity, June 30, 1995	\$ 75	\$ 508,265	\$ 508,340
Net income	-	28,410	28,410
Equity, June 30, 1996	75	536,675	536,750
Net income	-	21,016	21,016
Equity, June 30, 1997	<u>\$ 75</u>	<u>\$ 557,691</u>	<u>\$ 557,766</u>

The accompanying notes are an integral part of these financial statements.

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**COMBINED STATEMENTS OF CASH FLOWS**  
**for the years ended June 30, 1997 and 1996**  
**(dollars in thousands)**

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	1997	1996
Cash flows from operating activities:		
Operating income	\$ 59,883	\$ 62,249
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation and amortization	26,628	25,611
Effect of changes in:		
Water and power receivables, net	2,523	(2,027)
Materials and supplies	242	637
Other receivables	(144)	(11)
Accounts payable	2,410	(525)
Accrued payroll	671	174
Other liabilities	<u>(3,500)</u>	<u>3,163</u>
Net cash provided by operating activities	<u>88,713</u>	<u>89,271</u>
Cash flows from noncapital financing activities:		
Operating transfers out	(37,703)	(37,703)
Other income received and property tax refund	<u>1,189</u>	<u>8,676</u>
Net cash used by noncapital financing activities	<u>(36,514)</u>	<u>(29,027)</u>
Cash flows from capital and related financing activities:		
Bond issuance proceeds	129,854	-
Payment of bond issue costs	(852)	-
Transfers to escrow to defease bonds	(57,012)	-
Interest paid on long-term debt	(10,928)	(10,688)
Principal paid on long-term debt	(9,225)	(6,552)
Proceeds from sale of utility plant	116	-
Acquisition of utility plant	(35,254)	(29,440)
Payment of capital lease obligations	<u>(32)</u>	<u>-</u>
Net cash provided (used) by capital and related financing activities	<u>16,667</u>	<u>(46,680)</u>
Cash flows from investing activities:		
Interest income received	9,677	6,853
Purchases of investments held by trustee - restricted	(28,667)	(12,713)
Receipts from maturities of investment held by trustee-restricted	<u>25,601</u>	<u>12,877</u>
Net cash provided by investing activities	<u>6,611</u>	<u>7,017</u>
Increase in cash and cash equivalents	<u>75,477</u>	<u>20,581</u>
Cash and cash equivalents:		
Beginning of year	<u>122,603</u>	<u>102,022</u>
End of year	<u>\$ 198,080</u>	<u>\$ 122,603</u>

The accompanying notes are an integral part of these financial statements.

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**COMBINED STATEMENTS OF CASH FLOWS, *Continued***  
for the years ended June 30, 1997 and 1996  
(billions in thousands)

---

	1997	1996
Reported as:		
Cash	\$ 124	\$ 118
Equity in deposits and investments of the City Treasurer - restricted	83,738	19,750
Equity in deposits and investments of the City Treasurer - unrestricted	114,218	102,735
Total cash and cash equivalents, end of year	<u>\$ 198,080</u>	<u>\$ 122,603</u>
Noncash capital and related financing information:		
Revenue bond interest accretion	\$ 2,206	\$ 2,038
Amortization of bond discount and issuance costs	\$ 452	\$ 529
Amortization of bond refunding loss	\$ 191	-
Acquisition of fixed assets under capital lease	\$ 288	-

The accompanying notes are an integral part of these financial statements.

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT  
(a component unit of the City and County of San Francisco)**

**NOTES TO COMBINED FINANCIAL STATEMENTS**

(dollars in thousands)

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**1. Organization and Basis of Presentation:**

The San Francisco Water Department (the SFWD) was formed under the provisions of the City Charter of San Francisco. The SFWD is governed by a five-member Commission appointed by the Mayor, which determines such matters as rates and charges of services, approval of contracts, and Department policy.

The SFWD acquired the fully developed, mature water works for San Francisco on March 3, 1930. Since then, the City and County of San Francisco (the City) has operated and maintained the water works as the SFWD. The SFWD is engaged in the collection, transmission, and distribution of water and electricity to San Francisco and certain suburban areas. The Hetch Hetchy Project (HH) originated as a result of the Raker Act of 1913, which granted water and power resources rights-of-way on the Tuolumne River in Yosemite National Park to the City of San Francisco.

**Description of Reporting Entity:**

The combined financial statements include the accounts of the SFWD and HH, whose operations are interrelated. All significant interentity transactions have been eliminated. The combined entities are a component unit of the City and County of San Francisco (the City) and, as such, are included in the Comprehensive Annual Financial Report of the City as enterprise funds.

**Basis of Accounting:**

The financial activities of the SFWD and HH are accounted for on a flow of economic resources measurement focus, using the accrual basis of accounting. Under this method, all assets and liabilities associated with operations are included on the balance sheet; revenues are recorded when earned and expenses are recorded at the time liabilities are incurred.

**Use of Estimates:**

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

Continued

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**2. Significant Accounting Policies:**

**Utility Plant:**

Utility plant is stated at cost. Depreciation and amortization are computed by the straight-line method based on the estimated useful lives of the related assets, which range from 3 to 75 years for equipment and 3 to 173 years for facilities and improvements. No depreciation or amortization is recorded in the year of acquisition and a full year's depreciation or amortization is recorded in the year of disposal. Construction-in-progress represents the design and construction costs of various uncompleted projects.

Certain projects are constructed using the proceeds from the sale of bonds. A portion of interest costs incurred during the project construction period are capitalized as a component of project cost. Interest cost capitalized was \$493 and \$1,411 in 1997 and 1996, respectively.

**Cash and Cash Equivalents:**

Cash and cash equivalents include all highly liquid investments, including restricted assets, with an original purchased maturity of three months or less. All pooled deposits and investments of the City Treasurer are, in substance, demand deposits and are considered cash equivalents.

**Investments:**

Effective July 1, 1996, the City adopted the provisions of Governmental Accounting Standards Board (GASB) Statement No. 31, *Accounting and Financial Reporting for Certain Investments and External Investment Pools*. Adoption of this statement did not have a material impact on the SFWD's combined financial statements. GASB No. 31 requires investments to be recorded at fair value with the difference between cost and fair value recorded as an unrealized gain/loss. Investments are stated at fair value based upon quoted market prices.

**Accrued Vacation, Sick Leave, and Workers' Compensation:**

Accrued vacation pay, which may be accumulated up to ten weeks per employee, is charged to expense as earned. Unused sick leave accumulated on or prior to December 6, 1978 is vested and payable upon termination of employment by retirement, death, or disability caused by industrial accident. Sick leave earned subsequent to that date is nonvesting and may be accumulated up to six months per employee. The SFWD and HH are self-insured for workers' compensation claims and accrue the estimated cost of those claims, as well as the cost of incurred but not reported claims.

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**2. Significant Accounting Policies, continued:**

**Bond Discount and Issuance Costs:**

Bond discount and issuance costs are amortized over the term of the related bonds using the effective interest rate method.

**Damage and Claims Liability:**

The SFWD and HH are self-insured for general liability and property damage claims. The liability represents an estimate of the cost of all outstanding claims and incurred but not reported claims.

**Pensions:**

Effective July 1, 1996, the SFWD adopted GASB No. 27, *Accounting for Pensions by State and Local Government Employers* which establishes standards for the measurement, recognition and display of pension expenditures, and related liabilities, assets and note disclosures. For fiscal year ended June 30, 1997, the net pension obligation, as calculated by actuarial methods, equaled the contributions made by the SFWD.

**Revenue Recognition:**

Revenues from water and power services furnished to consumers are recorded in the combined financial statements in the period that meters are read. In general, customers are billed on a cyclical basis with large industrial customers billed monthly and all other customers bimonthly.

**Reclassifications:**

Certain reclassifications have been made to the 1996 financial statements to conform to the 1997 presentation. These reclassifications did not change total assets, liabilities, equity, or net income.

Continued

SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT  
(a component unit of the City and County of San Francisco)  
NOTES TO COMBINED FINANCIAL STATEMENTS  
(dollars in thousands)

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3. Utility Plant:

Utility plant at June 30, 1997 and 1996 consisted of the following:

	<b>1997</b>	<b>1996</b>
Land	\$ 21,437	\$ 21,437
Equipment	65,174	60,612
Facilities and improvements	920,383	897,120
Construction-in-progress	<u>40,635</u>	<u>32,536</u>
Total	1,047,629	1,011,705
Less accumulated depreciation and amortization	(438,017)	(411,497)
Net utility plant	<u>\$ 609,612</u>	<u>\$ 600,208</u>

Depreciation and amortization expense was \$26,628 and \$25,611 in 1997 and 1996, respectively.

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**4. Restricted Assets:**

Certain borrowing agreements require that the SFWD and HH maintain certain restricted cash and investment balances in trust (Note 5). Restricted assets consisted of the following at June 30, 1997 and 1996:

	<b>1997</b>	<b>1996</b>
Equity in deposits and investments of the City Treasurer:		
1972 Bond Fund	\$ 467	\$ 440
1987 Improvement Fund	5,448	6,401
1991 Reconstruction and Replacement Fund	9,364	12,909
1996 Construction Fund	<u>68,459</u>	-
Total	<u>83,738</u>	<u>19,750</u>
Investments held by trustee:		
1987 Revenue Bond Fund	4,088	3,792
1991 Revenue Bond Fund	3,763	4,639
1992 Revenue Bond Fund	99,580	100,039
1996 Revenue Bond Fund	<u>4,105</u>	-
Total	<u>111,536</u>	<u>108,470</u>
Interest receivable:		
1972 Bond Fund	7	-
1987 Improvement Fund	210	-
1991 Reconstruction and Replacement Fund	360	-
1996 Construction Fund	1,776	-
1991 Revenue Bond Fund	-	11
1992 Revenue Bond Fund	<u>-</u>	<u>1,084</u>
Total	<u>2,353</u>	<u>1,095</u>
Total restricted assets	<u><u>\$197,627</u></u>	<u><u>\$129,315</u></u>

Continued

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**5. Deposits and Investments:**

**Cash:**

At June 30, 1997 and 1996, the carrying amount of the SFWD's and HH's cash was \$124 and \$118, respectively with a corresponding FDIC insured bank balance of \$129 and \$91, respectively.

**Investments:**

At June 30, 1997 and 1996, the equity in deposits and investments of the City Treasurer was \$197,956 and \$122,485, respectively. Amounts held by the City are invested pursuant to policy guidelines established by the City Treasurer. The objectives of the policy are, in order of priority, preservation of capital, liquidity, and yield. The policy addresses soundness of financial institutions in which the City will deposit funds, types of investment instruments as permitted by the California Government Code, and the percentage of the portfolio which may be invested in certain instruments with longer terms to maturity. The Comprehensive Annual Financial Report of the City categorizes the level of risk associated with the City's pooled deposits and investments.

The investments below are held by the trustee in the SFWD's name. The fair value of the SFWD's investments approximates cost. At June 30, 1997 and 1996, investments held by the trustee on behalf of the SFWD included the following:

	<b>Fair Value</b>	
	<b>1997</b>	<b>1996</b>
U.S. Treasury bills	\$ 6,082	\$ 5,579
U.S. Treasury notes	102,876	100,034
Money market funds	<u>2,578</u>	<u>2,857</u>
Total	<u><u>\$111,536</u></u>	<u><u>\$108,470</u></u>

The SFWD is required by bond indenture to invest unused bond proceeds in government obligations.

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**6. Long-Term Debt:**

The SFWD's long-term debt consisted of the following at June 30, 1997 and 1996:

	<u>Interest Rates</u>	<u>Due Serially To</u>	<u>1997</u>	<u>1996</u>
General obligation bonds:				
1972 Municipal Water System Bonds	4.00% - 5.70%	2000	\$ 3,455	\$ 4,675
Less current portion of general obligation bonds			<u>(1,285)</u>	<u>(1,220)</u>
Long-term portion of general obligation bonds			<u>\$ 2,170</u>	<u>\$ 3,455</u>
Revenue Bonds:				
1987 Water Revenue Refunding Bonds	6.65% - 8.50%	1998	\$ 100,596	\$ 105,230
1991 Water Revenue Bonds	5.30% - 7.40%	2021	12,886	67,140
1992 Water Revenue Refunding Bonds	5.35% - 6.50%	2016	107,180	107,180
1996 Water Revenue Refunding Bonds	5.00% - 6.50%	2026	131,470	-
Unamortized bond discount and refunding loss			<u>(10,827)</u>	<u>(5,030)</u>
Total revenue bonds			341,305	274,520
Less current portion of revenue bonds			<u>(101,950)</u>	<u>(5,780)</u>
Long-term portion of revenue bonds			<u>\$ 239,355</u>	<u>\$ 268,740</u>

The payments of principal and interest amounts on the various bonds are collateralized by future water sale revenues.

The 1987 and 1991 Revenue Bonds include capital appreciation bonds with original principal amounts of \$13,132 and \$1,051, respectively. Interest is due only upon redemption or maturity of these capital appreciation bonds. The accrued interest is added to the principal balance. The recorded amount of the 1987 and 1991 capital appreciation bonds at June 30, 1997 was \$27,576 and \$1,585, respectively and at June 30, 1996 was \$25,476 and \$1,480, respectively.

In fiscal 1992, the SFWD issued \$107,180 of revenue bonds pursuant to a crossover refunding of 1987 Water Revenue Refunding Bonds. The proceeds were used to purchase U.S. government securities which were placed into an irrevocable trust to be used for the payment of interest on the 1992 bonds and \$460 per year of principal due on the 1987 bonds through November 1, 1997 (crossover date), at which time the remaining proceeds will be used to advance refund the 1987 bonds. The debt service requirements of the 1992 bonds after the crossover date will be made from the net revenues of the SFWD.

Continued

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**6. Long-Term Debt, continued:**

In fiscal 1997, the SFWD issued \$131,470 (face value) of 1996 Series A Water Revenue Bonds. A portion of the bond proceeds was designated for the purpose of refunding \$53,090 (face value) of 1991 Water Revenue Bonds which were due serially to 2020. The refunding extended maturities on the bonds in order to lower required annual payments. After payment of \$852 in issue costs, \$57,012 of the net bond proceeds was transferred to a trustee to be placed in an irrevocable trust to redeem the refunded portion of the 1991 revenue bonds. Accordingly, the refunded portion of the 1991 revenue bonds was removed from the SFWD's balance sheet. The advance refunding decreased the SFWD's total debt service payments over the next 29 years by \$2,475 and provided for an economic gain of \$4,064. The resulting accounting loss of \$5,989 has been deferred in accordance with GASB Statement No. 23, *Accounting and Financial Reporting for Refunding of Debt Reported by Proprietary Activities*, and is being amortized over the remaining life of the old debt.

Minimum future obligations on long-term debt at June 30, 1997 are as follows:

<u>Year Ending June 30</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
1998	\$ 103,235	\$ 10,246	\$113,481
1999	6,440	10,241	16,681
2000	7,415	10,200	17,615
2001	6,995	10,127	17,122
2002	7,350	6,619	13,969
Thereafter	<u>224,152</u>	<u>84,784</u>	<u>308,936</u>
Total	<u><u>\$355,587</u></u>	<u><u>\$132,217</u></u>	<u><u>\$487,804</u></u>

**7. Suburban Water Rate Agreement:**

On July 1, 1984, certain suburban customers entered into an agreement that establishes water rates to be charged to the suburban customers. In accordance with the agreement, the water rates are calculated based on a prescribed allocation of expenses and an allowed rate of return on certain water-related assets. During fiscal year 1997 and 1996, water sale revenues charged to such suburban customers were \$61,706 and \$53,154, respectively. Such amounts are subject to final review by the suburban customers based on the suburban revenue requirement calculation. The suburban revenue requirement calculation results in a receivable from or payable to the suburban customers at year-end.

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**8. Employees' Retirement Plan:**

**Plan Description:**

The City has a single-employer defined benefit retirement plan (the Plan) which is administered by the San Francisco City and County Employees' Retirement System (the Retirement System). The Plan covers substantially all full-time employees of the SFWD and HH along with other employees of the City. The Plan provides basic service retirement, disability, and death benefits based on specified percentages of final average salary and provides cost-of-living adjustments after retirement. The Plan also provides pension continuation benefits to qualified survivors. The San Francisco City and County Charter and Administrative Code is the authority which establishes and amends the benefit provisions and employer obligations of the Plan. The Retirement System issues a publicly available financial report that includes financial statements and required supplementary information of the Plan. That report may be obtained by writing to the San Francisco City and County Employees' Retirement System, 1155 Market Street, 2nd Floor, San Francisco, California 94103 or by calling (415) 554-1520.

**Funding Policy:**

Contributions are made to the basic plan by the SFWD, HH and their employees. Employee contributions are mandatory. Employee contribution rates for 1997 varied from 7.5% to 8% as a percentage of covered salary. The SFWD and HH are required to contribute at an actuarially-determined rate. The SFWD and HH contribution rates for 1997 as a percentage of covered payroll were approximately .93%. The SFWD and HH contributions to the San Francisco City and County Employees' Retirement System for the years ended June 30, 1997, 1996, and 1995 were \$359, \$1,685, and \$2,152, respectively, equal to the required contributions for the year.

**9. Health Care Benefits:**

Health care benefits for employees, retired employees and surviving spouses (beneficiaries) are financed by beneficiaries and by the City through the Health Service System of the City. The contributions for all of the City Fund groups is determined by charter provision based on similar contributions made by the 10 most populous counties in California. The City's postretirement health care benefit contributions are recognized when incurred. The costs to SFWD and HH for the years ended June 30, 1997 and 1996 were \$2,085 and \$2,707, respectively, including \$732 and \$683, respectively, to provide post-retirement health care benefits for retired employees. The City's liability for postretirement health care benefits is limited to its annual contribution.

Continued

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**10. Deferred Compensation Plan:**

The City offers its employees, including the SFWD and HH employees, a deferred compensation plan created in accordance with Internal Revenue Code (IRC) Section 457. The plan, available to all City employees, permits them to defer a portion of their salary until future years. The deferred compensation is not available to employees until retirement, termination, or certain other covered events.

As required by IRC Section 457, all amounts of compensation deferred under the plan, all property and rights purchased with those amounts, and all income attributable to those amounts (until paid or made available to the employer or other beneficiary) remain the property of the City, subject only to the claims of the City's general creditors. Participants' rights under the plan are equal to those of general creditors of the City in an amount equal to the fair market value of the deferred account for each participant. Amounts deferred under the plan are displayed in an agency fund in the Comprehensive Annual Financial Report of the City.

**11. Related Parties:**

Included in 1997 and 1996 operating revenues are sales of power to departments within the City of \$42,455 and \$41,669, respectively. Sales of water delivered without charge to certain City departments of \$5,032 and \$5,120, respectively, are not included in operating revenues.

During 1995, the San Francisco Public Utilities Commission (the Commission) transferred all responsibility for maintaining and repairing the San Francisco Municipal Railway (MUNI) overhead lines to the MUNI from HH. As HH remains the funding source for such maintenance, HH transferred \$7,538 to the MUNI during each of the years ended June 30, 1997 and 1996.

Effective July 1, 1996, the Commission assumed responsibility for certain overhead costs previously incurred by the individual departments under its control. These costs are now allocated back to the SFWD, HH and the Clean Water Department. For the year ended June 30, 1997 the Commission allocated \$10,446 in overhead expenses to the SFWD and HH.

**12. Commitments and Contingencies:**

HH has contracted with Pacific Gas and Electric (PG&E) to provide HH with backup power, services and transmission should HH be unable to generate power sufficient to meet the minimum amounts of power guaranteed under certain long-term contracts. The PG&E agreement allows PG&E to review past billings paid by HH and retroactively adjust these payments to actual backup power charges as finally determined by PG&E. During fiscal years 1997 and 1996, HH purchased \$11,258 and \$12,143, respectively, of power, backup and transmission services.

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**12. Commitments and Contingencies**, continued:

In order to comply with Federal Energy Regulatory Commission regulations, HH has contracted with the Modesto and Turlock Irrigation Districts to meet quality and depth of water standards on the Tuolumne River. Under this agreement, HH is obligated to pay \$3,570 annually through 2001 for services rendered. In addition, HH is required to pay 52% of environmental monitoring costs, not to exceed \$1,400, and to provide approximately \$750 over 20 years for habitat and facility improvements.

At June 30, 1997, the SFWD and HH have outstanding commitments with third parties of approximately \$15,235 for various capital projects and \$6,145 for materials and services.

In addition, the SFWD and HH are involved in various lawsuits, claims, and disputes, which are normal to the SFWD's and HH's operations. In the opinion of management, the costs that might be incurred, if any, would not materially affect the SFWD's or HH's financial position or results of operations.

**13. Risk Management:**

The SFWD and HH are self-insured for general liabilities, property damage and workers' compensation claims. The risk of loss is managed internally by setting aside assets for claim settlement and recording an estimate of the cost of all outstanding claims and incurred but not reported claims as liabilities. Claim liabilities are recorded when it is probable that a loss has occurred and the amount of loss can be reasonably estimated. Liabilities include an amount for claims that have been incurred but not reported. Because actual claim liabilities depend on such complex factors as inflation, changes in legal doctrines, and damage awards, the process used in computing claim liabilities does not necessarily result in an exact amount and, therefore, it is reasonably possible that claim liabilities could change in the future. Claim liabilities are reevaluated periodically to take into consideration recently settled claims, the frequency of claims, and other economic and social factors. The liability is the SFWD and HH's best estimate based on available information. Changes in the reported liability for the years ended June 30, 1997 and 1996 resulted from the following:

	<b>1997</b>	<b>1996</b>
Beginning of year liability	\$ 6,433	\$ 10,378
Current year claims and changes in estimates	14	(2,103)
Current year claims payments	<u>(1,193)</u>	<u>(1,842)</u>
End of the year liability	<u><u>\$ 5,254</u></u>	<u><u>\$ 6,433</u></u>
Consisting of general liabilities and property damage	\$ 2,824	\$ 4,246
Workers' compensation	<u>2,430</u>	<u>2,187</u>
	<u><u>\$ 5,254</u></u>	<u><u>\$ 6,433</u></u>

Continued

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**NOTES TO COMBINED FINANCIAL STATEMENTS**  
**(dollars in thousands)**

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**14. Property Tax Refund:**

Included in nonoperating revenues for the years ended June 30, 1997 and 1996 was \$2,161 and \$5,237, respectively, representing a refund of property tax paid in previous years to the cities of Alameda and San Mateo, following partial settlement relating to Proposition 13.

**15. Subsequent Event:**

On November 4, 1997, the voters of San Francisco approved the issuance of \$304,000 of Water Revenue Bonds. The SFWD anticipates that these bonds will be sold over a three-year period beginning with \$100,000 in the spring of 1998. The interest rates and maturity dates have not yet been determined.

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**SUPPLEMENTAL SCHEDULE - COMBINING BALANCE SHEET**

June 30, 1997

(dollars in thousands)

ASSETS	San Francisco Water Department	Hetch Hetchy Project	Combined
<b>Current assets:</b>			
Cash	\$ 104	\$ 20	\$ 124
Equity in deposits and investments of the City Treasurer	61,517	52,701	114,218
<b>Receivables:</b>			
Water and power (net of allowance for doubtful accounts of \$1,000 in 1997 and \$143 in 1996)	11,247	4,293	15,540
Interest and other	1,608	1,085	2,693
Total receivables	12,855	5,378	18,233
Materials and supplies - at average cost	1,536	251	1,787
Total current assets	76,012	58,350	134,362
<b>Restricted assets:</b>			
Equity in deposits and investments of the City Treasurer	83,738		83,738
Investments held by trustee	111,536		111,536
Interest receivable	2,353		2,353
Total restricted assets	197,627	-	197,627
Utility plant	617,390	389,604	1,006,994
Construction-in-progress	26,805	13,830	40,635
Total utility plant	644,195	403,434	1,047,629
Less accumulated depreciation and amortization	(241,486)	(196,531)	(438,017)
Net utility plant	402,709	206,903	609,612
Bond issuance costs, net	2,162	-	2,162
Total assets	<u>\$ 678,510</u>	<u>\$ 265,253</u>	<u>\$ 943,763</u>

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**SUPPLEMENTAL SCHEDULE - COMBINING BALANCE SHEET, Continued**  
**June 30, 1997**  
**(dollars in thousands)**

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EQUITY AND LIABILITIES	San Francisco Water Department	Hetch Hetchy Project	Combined
Current liabilities:			
General obligation bonds	\$ 1,285		\$ 1,285
Revenue bonds	101,950		101,950
Accounts payable	5,699	\$ 3,140	8,839
Accrued payroll	2,387	497	2,884
Accrued vacation, sick leave, and workers' compensation	3,348	1,098	4,446
Bond interest payable	3,319		3,319
Retention due contractors	778	254	1,032
Suburban water rate agreement	9,722		9,722
Damage and claims liability	1,273	84	1,357
Deposits and construction advances	1,426	189	1,615
Other	482	525	1,007
Total current liabilities	<u>131,669</u>	<u>5,787</u>	<u>137,456</u>
Other long-term liabilities:			
Accrued vacation, sick leave and workers' compensation	4,212	1,133	5,345
Damage and claims liability	1,306	161	1,467
Capital lease obligation		204	204
Total other long-term liabilities	<u>5,518</u>	<u>1,498</u>	<u>7,016</u>
Long-term debt:			
General obligation bonds	2,170		2,170
Revenue bonds	<u>239,355</u>		<u>239,355</u>
Total long-term debt	<u>241,525</u>	-	<u>241,525</u>
Total liabilities	<u>378,712</u>	<u>7,285</u>	<u>385,997</u>
Equity:			
Contributed capital	75		75
Retained earnings - reserved for bond requirements	228,018		228,018
Retained earnings - unreserved	<u>71,705</u>	<u>257,968</u>	<u>329,673</u>
Total equity	<u>299,798</u>	<u>257,968</u>	<u>557,766</u>
Total equity and liabilities	<u>\$ 678,510</u>	<u>\$ 265,253</u>	<u>\$ 943,763</u>

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**SUPPLEMENTAL SCHEDULE - COMBINING STATEMENT OF INCOME**

June 30, 1997

(dollars in thousands)

	<u>San Francisco Water Department</u>	<u>Hetch Hetchy Project</u>	<u>Eliminations</u>	<u>Combined</u>
<b>Operating revenues:</b>				
Water sales	\$ 123,623	\$ 19,561	\$ (19,037)	\$ 124,147
Electricity sales		71,700		71,700
Rental income	5,181	241		5,422
Service installation income	2,169			2,169
Total operating revenues	<u>130,973</u>	<u>91,502</u>	<u>(19,037)</u>	<u>203,438</u>
<b>Operating expenses:</b>				
Purchased energy and water	19,037	7,252	(19,037)	7,252
Transmission and distribution	18,084	10,462		28,546
Operations and maintenance	27,676	5,860		33,536
General and administrative	25,455	20,564		46,019
Depreciation and amortization	18,866	7,762		26,628
Property taxes	1,225	349		1,574
Total operating expenses	<u>110,343</u>	<u>52,249</u>	<u>(19,037)</u>	<u>143,555</u>
Operating income	<u>20,630</u>	<u>39,253</u>		<u>59,883</u>
<b>Nonoperating revenues (expenses):</b>				
Interest income	7,894	3,239		11,133
Interest expense	(13,565)			(13,565)
Gain on sale of utility plant	85	26		111
Other revenues	548	609		1,157
Net nonoperating revenues (expenses)	<u>(5,038)</u>	<u>3,874</u>		<u>(1,164)</u>
Income before operating transfers	<u>15,592</u>	<u>43,127</u>		<u>58,719</u>
<b>Operating transfers:</b>				
General fund transfers to the City		(30,165)		(30,165)
Operating transfer to Municipal Railway		(7,538)		(7,538)
Total operating transfers		<u>(37,703)</u>		<u>(37,703)</u>
Net income	<u>\$ 15,592</u>	<u>\$ 5,424</u>	<u>-</u>	<u>\$ 21,016</u>

**SAN FRANCISCO WATER DEPARTMENT AND  
HETCH HETCHY PROJECT**  
**(a component unit of the City and County of San Francisco)**  
**SUPPLEMENTAL SCHEDULE - COMBINING STATEMENT OF EQUITY**

June 30, 1997

(dollars in thousands)

	<u>Contributed Capital</u>	<u>Retained Earnings</u>	<u>Total</u>
<b>San Francisco Water Department:</b>			
Equity, July 1, 1996	\$ 75	\$ 284,131	\$ 284,206
Net income	—	15,592	15,592
Equity, June 30, 1997	<u>\$ 75</u>	<u>\$ 299,723</u>	<u>\$ 299,798</u>
 <b>Hetch Hetchy Project:</b>			
Equity, July 1, 1996	—	\$ 252,544	\$ 252,544
Net income	—	5,424	5,424
Equity, June 30, 1997	<u>—</u>	<u>\$ 257,968</u>	<u>\$ 257,968</u>
Combined equity, June 30, 1997	<u>\$ 75</u>	<u>\$ 557,691</u>	<u>\$ 557,766</u>

**CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP**

**Financial Statements**

**June 30, 1997 and 1996**

**(With Independent Auditors' Report Thereon)**



# **KPMG Peat Marwick LLP**

Three Embarcadero Center  
San Francisco, CA 94111

## **Independent Auditors' Report**

Honorable Mayor and Board of Supervisors  
City and County of San Francisco:

We have audited the accompanying balance sheets of the Clean Water Program Fund Group (the Enterprise) of the City and County of San Francisco, California (the City), as of June 30, 1997 and 1996, and the related statements of revenue, expenses and changes in retained earnings and cash flows for the years then ended. These financial statements are the responsibility of the City's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in note 1, the financial statements present only the Enterprise and are not intended to present fairly the financial position of the City and County of San Francisco, California, and the results of its operations and the cash flows of its proprietary fund types in conformity with generally accepted accounting principles.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Clean Water Program Fund Group of the City and County of San Francisco, California, as of June 30, 1997 and 1996, and the results of its operations and its cash flows for the years then ended in conformity with generally accepted accounting principles.

As discussed in note 2 to the financial statements, the Enterprise changed its method of valuing investments effective July 1, 1996.

October 31, 1997

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Balance Sheets  
(Dollars in thousands)

June 30, 1997 and 1996

	1997	1996	1997	1996
<u>Assets</u>				
<u>Restricted assets:</u>				
Account receivable, principally for sewer service charges, less allowance for uncollectible accounts of \$260 in 1997 and \$196 in 1996	\$ 29,102	27,729	\$ 6,071	7,718
Sewer revenue bond funds	94,711	80,057	2,006	15,254
Funds held for construction	113,104	169,598	4,150	4,150
Due from other funds	—	255	2,460	2,460
Accrued interest receivable on sewer revenue bond funds	2,891	4,342	14,700	9,635
Grant payment receivable less allowance for ineligible costs of \$5,281 in 1997 and 1996	410	—	10,186	9,155
Total restricted assets	<u>246,473</u>	<u>281,426</u>	<u>7,600</u>	<u>10,793</u>
<u>Total current assets:</u>			7,600	8,000
Current liabilities payable from restricted assets:			58,35	67,165
Contractor retentions payable			1,395	3,374
General Obligation Bonds, less current portion			4,660	9,060
General Purpose Sewer Revenue Bonds Series 1991, net of unamortized bond discount of \$269 in 1997 and \$130 in 1996			15,480	18,040
Sewer Revenue Refunding Bonds Series 1992, net of unamortized bond discount of \$3,897 in 1997 and \$4,111 in 1996			276,483	290,969
Sewer Revenue Refunding Bonds Series 1994, net of unamortized bond discount of \$2,293 in 1997 and \$2,384 in 1996 and deferred loss on refunding of \$11,602 in 1997 and \$12,080 in 1996			161,086	160,517
Sewer Revenue Bonds, Series 1995			56,668	56,171
State Revolving Fund loans			173,735	174,426
Deferred revenue			6,432	7,564
Total liabilities			<u>754,274</u>	<u>787,286</u>
<u>Fund equity:</u>				
Contributed capital:				
Federal Capital Grants			464,678	479,758
State Capital grants			71,918	74,414
Contribution from City and County of San Francisco			108,238	108,238
Retained earnings			265,028	218,549
Total fund equity			<u>909,162</u>	<u>890,959</u>
<u>Commitments and contingencies</u>			<u>\$ 1,664,136</u>	<u>1,668,245</u>

See accompanying Notes to Financial statements  
\$666 in 1997 and \$483 in 1996

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Statements of Revenues, Expenses and  
Changes in Retained Earnings  
(Dollars in thousands)

Years ended June 30, 1997 and 1996

	<u>1997</u>	<u>1996</u>
Sewer service charges and other operating revenue	\$ 140,539	130,105
Operating expenses:		
Salaries, wages and fringe benefits	26,011	30,929
Contracted services	6,082	9,621
Materials, utilities and supplies	29,005	24,226
Depreciation	33,176	30,346
Overhead allocation paid to the General Fund of the City and County of San Francisco	<u>1,810</u>	<u>1,751</u>
	<u>96,084</u>	<u>96,873</u>
Operating income	<u>44,455</u>	<u>33,232</u>
Other income (expense):		
Interest income	12,881	12,160
Interest expense	(36,928)	(34,419)
Net increase in the fair value of investments	787	—
Other, net	<u>(1,302)</u>	<u>(10,896)</u>
	<u>(24,562)</u>	<u>(33,155)</u>
Capitalized interest expense, net of capitalized interest income	<u>3,679</u>	<u>9,984</u>
	<u>(20,883)</u>	<u>(23,171)</u>
Net income before operating transfer	23,572	10,061
Transfer from the Debt Service Fund of the City and County of San Francisco	<u>4,693</u>	<u>4,679</u>
Net income	28,265	14,740
Add depreciation on fixed assets acquired by federal and state capital grants	<u>17,576</u>	<u>14,432</u>
Increase in retained earnings	<u>45,841</u>	<u>29,172</u>
Retained earnings at beginning of year, as previously reported	218,549	189,377
Adjustment to reflect the cumulative effect of the change in accounting for investments as of July 1, 1996	<u>638</u>	<u>—</u>
Retained earnings at beginning of year, as restated	<u>219,187</u>	<u>189,377</u>
Retained earnings at end of year	<u>\$ 265,028</u>	<u>218,549</u>

See accompanying notes to financial statements.

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Statements of Changes in Fund Equity  
(Dollars in thousands)

Years ended June 30, 1997 and 1996

	Contributed capital				
	Federal capital grants	State capital grants	Contribution from City and County of San Francisco	Retained earnings	Total
Balances at June 30, 1995	\$ 463,071	77,567	108,238	189,377	838,253
Federal and state capital grants	29,028	(1,062)	—	—	27,966
Net income	—	—	—	14,740	14,740
Allocation of depreciation	(12,341)	(2,091)	—	14,432	—
Balances at June 30, 1996, as previously reported	479,758	74,414	108,238	218,549	880,959
Adjustment to reflect the cumulative effect of the change in accounting for investments as of July 1, 1996	—	—	—	638	638
Retained earnings at July 1, 1996, as restated	479,758	74,414	108,238	219,187	881,597
Net income	—	—	—	28,265	28,265
Allocation of depreciation	(15,080)	(2,496)	—	17,576	—
Balances at June 30, 1997	\$ 464,678	71,918	108,238	265,028	909,862

See accompanying notes to financial statements.

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Statements of Cash Flows  
(Dollars in thousands)

Years ended June 30, 1997 and 1996

	<u>1997</u>	<u>1996</u>
Cash flows from operating activities:		
Operating income	\$ 44,455	33,232
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	33,176	30,346
Changes in assets and liabilities:		
Increase in accounts receivable	(1,673)	(2,708)
Increase in due to other funds	(255)	—
Increase in grant receivable	(410)	—
Increase (decrease) in accounts payable and accrued expenses	<u>859</u>	<u>(2,679)</u>
Net cash provided by operating activities	<u>76,152</u>	<u>58,191</u>
Cash flows from investing activities:		
Proceeds from sale of investments	223,948	273,263
Purchase of investments	(173,014)	(344,580)
Interest received	13,179	13,689
Net increase in fair value of investments	1,425	—
Other investing activities	<u>866</u>	<u>400</u>
Net cash provided by (used in) investing activities	<u>66,404</u>	<u>(57,228)</u>
Cash flows from capital and related financing activities:		
Principal paid on bond maturities	(16,245)	(15,395)
Federal and state capital grants	58	36,382
Interest and other bond costs paid	(36,320)	(36,907)
Acquisition and construction of capital assets	(81,337)	(103,993)
Reconstruction costs paid	—	(4,648)
Transfer in from the debt service fund	4,693	4,679
State Revolving Fund loans	10,000	20,479
Principal paid on loans	(9,660)	(8,540)
Other capital financing increases	173	3,000
Other capital financing decreases	<u>(4,824)</u>	<u>—</u>
Net cash used in capital and related financing activities	<u>(133,462)</u>	<u>(104,943)</u>
Net increase (decrease) in cash and cash equivalents	9,094	(103,980)
Cash and cash equivalents at beginning of year	<u>153,778</u>	<u>257,758</u>
Cash and cash equivalents at end of year	<u>\$ 162,872</u>	<u>153,778</u>

See accompanying notes to financial statements.

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

June 30, 1997 and 1996

(1) Significant Accounting Policies

(a) *Organization and Basis of Presentation*

In 1976, the electorate of the City and County of San Francisco (the City) approved a proposition authorizing the City to issue \$240,000 principal amount of revenue bonds (Voter Approved Bonds) pursuant to the State of California Revenue Bond Law of 1941 for the purpose of acquiring, constructing, improving and financing improvements to the City's municipal sewage treatment and disposal system. Since then, the Board of Supervisors of the City has adopted resolutions (the Resolutions) providing for the issuance of various sewer revenue and refunding bond series. As of June 30, 1993, the City exhausted its bonding capacity under the 1976 proposition approved by the electorate.

The Resolutions of the City's municipal sewage treatment and disposal system require the City to keep separate books of record and accounts. The financial statements are prepared on the basis that all sewage system related assets and liabilities of the City were transferred to the City and County of San Francisco Clean Water Program Fund Group (the Enterprise) effective July 1, 1977, the first day of the fiscal year in which the San Francisco Series A Sewer Revenue Bonds of 1976 were issued.

Effective July 1, 1996, the oversight responsibility of the Enterprise was reassigned from the Department of Public Works to the Public Utilities Commission of the City in accordance with a directive issued by the Mayor under Section 4.128 of the City's Charter.

The Enterprise is accounted for using the accrual method. Under this method, revenues are recorded when earned and expenses are recorded when the related liability is incurred.

The Enterprise is an integral part of the City and County of San Francisco, and the accompanying financial statements are included as part of the general purpose financial statements prepared by the City.

The Enterprise does not apply Financial Accounting Standards Board (FASB) statements and interpretations issued after November 30, 1989. The Enterprise applies all applicable Governmental Accounting Standards Board (GASB) pronouncements, as well as statements and interpretations of FASB, the Accounting Principles Board Opinions and Accounting Research Bulletins of the Committee on Accounting Procedure issued on or before November 30, 1989, unless those pronouncements conflict or contradict GASB pronouncements.

(Continued)

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

**(1) Significant Accounting Policies, Continued**

*(b) Investments*

For 1997, the Enterprise has valued certain investments at fair value, based upon quoted market prices. For 1996, the investments were valued at amortized cost.

Money market funds and banker's acceptances that have a remaining maturity at the time of purchase of one year or less are carried at amortized cost.

*(c) Property, Plant and Equipment*

Property, plant and equipment with an original acquisition date prior to July 1, 1977 are recorded in the financial statements at estimated cost, as determined by an independent professional appraisal, or at cost, if known. All subsequent acquisitions have been recorded at cost.

*(d) Depreciation*

Depreciation is computed using the straight-line method over the estimated useful lives of the related assets ranging from 4 to 75 years. One half year's depreciation is recorded during the first year of operation which approximates asset utilization.

The portion of depreciation relating to completed assets financed by capital grants is closed to federal and state capital grant equity.

*(e) Construction in Progress*

The cost of acquisition and construction of major plant and equipment is recorded as construction in progress. As facilities are accepted by the City and become operative, they are transferred to the plant and equipment accounts and depreciated.

*(f) Sewer Fee Revenue*

Sewer service charges are based on water usage as determined by the San Francisco Water Department. Billings are on a monthly or bimonthly basis. Revenues reflected in the financial statements include accruals based on estimates for the periods between termination of the billing cycle and the end of the fiscal year.

Rates must be set to produce sufficient revenue to fund the obligations of the Enterprise as defined in the Resolutions, including costs for operation, maintenance, repair and replacements, revenue bond debt service and compliance with federal and state laws and regulations. In addition, City Ordinance No. 198-77 requires that rates be recommended annually to produce sufficient revenue (except to the extent that funds are provided by transfers from other City funds - note 11) to pay debt service on sewage-related general obligation bonds.

(Continued)

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

(1) Significant Accounting Policies, Continued

(g) *Capital Grants*

Funding for the plant and equipment of the Enterprise has been provided primarily from capital grants by the Environmental Protection Agency of the United States (EPA) and the California State Water Resources Control Board (SWRCB) (note 12a). When eligible costs are incurred, a corresponding grant payment receivable is recognized, less an allowance for costs that may be subsequently ruled ineligible. All capital grant funds are recognized as contributed capital in the financial statements.

(h) *Contribution from the City and County of San Francisco*

The net book value of all assets and liabilities, including liabilities under sewage-related general obligation bonds relating to the sewage system transferred from the City to the Enterprise, are reflected as contributed capital in the financial statements.

(i) *Amortization of Bond Discounts and Issue Costs*

Bond discounts and issue costs are amortized over the term of the related bonds.

(j) *Capitalization of Interest*

Interest costs less interest income earned on the proceeds of tax-exempt borrowings, net of arbitrage rebates, are capitalized on assets which require a period of time for construction or to otherwise prepare them for their intended use. Such amounts are amortized over the useful lives of the assets.

(k) *Statements of Cash Flows*

Cash and cash equivalents include all highly liquid investments with original purchase maturities of three months or less. Pooled cash and investments in the City's Treasury represent monies in a cash management pool and such accounts are similar in nature to demand deposits.

(l) *Income Taxes*

As a governmental agency, the Enterprise is exempt from both federal income taxes and California state franchise taxes.

(Continued)

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

**(1) Significant Accounting Policies, Continued**

*(m) Refunding of Debt*

Gains or losses occurring from advance refundings are deferred and amortized into interest expense over the remaining life of the old bonds or the life of the new bonds, whichever is shorter.

*(n) Accrued Vacation and Sick Leave Pay*

Vacation pay, which may be accumulated up to ten weeks depending on an employee's length of service, is payable upon termination.

Sick leave may be accumulated up to six months. Unused amounts, accumulated prior to December 6, 1978, are vested and are payable upon termination of employment by retirement or disability caused by industrial accident or death. Sick leave earned subsequent to that date is nonvesting and hence, is not a liability.

*(o) Arbitrage Rebate Payable*

The Series 1991, 1992, 1994 and 1995 Bonds are subject to an arbitrage rebate requirement in accordance with regulations issued by the U.S. Treasury Department. The requirements stipulate, in general, that earnings from the investment of the tax-exempt bond proceeds that exceed related interest costs on the bonds must be remitted to the federal government on every fifth anniversary of each bond issue. There is no estimated arbitrage liability as of June 30, 1997 or 1996.

*(p) Use of Estimates*

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

*(q) Reclassifications*

Certain amounts from the 1996 financial statements have been reclassified to conform with the 1997 financial statement presentation.

(Continued)

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

**(2) Change in Accounting Method**

Effective July 1, 1996, the Enterprise adopted the provisions of GASB Statement No. 31, *Accounting and Financial Reporting for Certain Investments and External Investment Pools*, which require governmental entities to report certain investments at fair value in the balance sheet and recognize, in the operating statement, the corresponding change in fair value in the year in which the change occurred. In accordance with GASB Statement No. 31, the Enterprise has stated certain investments, including the pooled investments held by the City, at fair value, and has restated retained earnings as of July 1, 1996 to reflect the cumulative effect of the change. The effect on the 1997 financial statements was to increase net income by approximately \$787, and retained earnings by a total of \$1,425.

**(3) Cash and Investments**

The captions on the balance sheet related to cash and investments at June 30 are as follows:

	<u>1997</u>	<u>1996</u>
Sewer revenue bond funds	\$ 94,711	80,057
Funds held for construction	<u>113,104</u>	<u>169,598</u>
	<u>\$ 207,815</u>	<u>249,655</u>

*Investments*

The City's pooled cash and investments are invested pursuant to investment policy guidelines established by the City Treasurer. The objectives of the policy guidelines are, in order of priority, preservation of capital, liquidity, and yield. The policy addresses soundness of financial institutions in which the City will deposit funds, types of investment instruments as permitted by the California Government Code, and the percentage of the portfolio which may be invested in certain instruments with longer terms to maturity. The Comprehensive Annual Financial Report of the City categorizes the level of custodial risk associated with the City's pooled cash and investments. The City Treasurer allocates monthly income from the investment of pooled cash in proportion to the end-of-month balances held by the Enterprise.

The Enterprise is required by its bond indenture to invest sewer revenue bond funds in government obligations, time deposits, or demand deposits. The Enterprise follows the investment policy guidelines of the City Treasurer for its other investments, including those investments held by trustees.

(Continued)

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

**(3) Cash and Investments, Continued**

The Enterprise's investments, including those held by trustees, are categorized below to give an indication of the level of custodial risk assumed by the Enterprise at year-end. Category 1 includes investments that are insured or registered or for which the securities are held by the Enterprise or its agent in the Enterprise's name. Category 2 includes uninsured and unregistered investments for which the securities are held by the counter-party's trust department or agent in the Enterprise's name. Category 3 includes uninsured and unregistered investments for which the securities are held by the counter-party, or by its trust department or agent but not in the Enterprise's name.

The Enterprise's investment portfolio is stated at fair value (except for money market funds and banker's acceptances which are stated at amortized cost which approximates market) and is based on quotes obtained from national exchanges as of June 30, 1997.

	Category			Carrying value
	<u>1</u>	<u>2</u>	<u>3</u>	
Bankers' acceptances	\$ 4,935	—	—	4,935
U.S. Treasury bills	32,317	—	—	32,317
Other U.S. Government securities	<u>12,626</u>	<u>—</u>	<u>—</u>	<u>12,626</u>
	<u>\$ 49,878</u>	<u>—</u>	<u>—</u>	<u>49,878</u>
Money market funds				796
Pooled cash and investments held by the City Treasurer				<u>157,141</u>
				<u>\$ 207,815</u>

Cash and cash equivalents on the statement of cash flows comprised the following:

	<u>1997</u>	<u>1996</u>
Money Market Funds	\$ 796	805
Bankers' acceptances	4,935	4,444
Pooled cash and investments held by the City Treasurer	<u>157,141</u>	<u>148,529</u>
	<u>\$ 162,872</u>	<u>153,778</u>

(Continued)

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

**(4) Sewer Revenue and General Purpose Sewer Revenue Bond Funds**

The revenue of the Enterprise, as defined in the Resolutions, is pledged for the payment of principal and interest of the General Purpose Sewer Revenue Bond Series 1991, the Sewer Revenue Refunding Bond Series 1992, the Sewer Revenue Refunding Bond Series 1994, and the Sewer Revenue Bonds Series 1995. In accordance with the provisions of the Resolutions, the following restricted funds have been established:

*Maintenance and Operation Fund* - used for payment of annual budgeted operating expenses. No revolving balance is maintained in this fund. Any year-end surplus is credited to the Surplus Revenue Fund as defined in the Resolutions.

*Expense Fund* — used for payment of costs and expenses relating to issuance and sale of General Purpose Sewer Revenue Bond Series 1995.

*General Purpose Interest Fund* — requires periodic contributions to be made by October 1 of each fiscal year, beginning October 1, 1990, which aggregate an amount equal to the interest due on the General Purpose Sewer Revenue Bonds.

*General Purpose Principal Fund* — requires periodic contributions to be made by October 1 of each fiscal year, aggregating an amount equal to the principal of the General Purpose Sewer Revenue Bonds, with maturity beginning on October 1, 1991.

*General Purpose Reserve Fund* — requires cash or one or more Bond Reserve Fund or Insurance Policies in an amount equal to the Average Annual Debt Service on all General Purpose Sewer Revenue Bonds outstanding. The Enterprise has met this requirement by purchasing a Municipal Bond Debt Service Reserve Fund Insurance Policy and maintaining a cash reserve fund.

*Repair and Replacement Fund* — requires annual deposits, to the extent that revenues are available, which shall aggregate during each fiscal year, beginning in the fiscal year ended June 30, 1986, the greater of (1) the amount required by federal and state grant agreements relating to the Enterprise or (2) the sum of \$5,000, which shall increase in each fiscal year by 5% of the preceding fiscal year's deposit. The Enterprise deposited approximately \$10,300 and \$8,900 into the Repairs and Replacement Fund during the fiscal years ended June 30, 1997 and 1996, respectively. These monies are used to pay the costs of replacements, renewals and repairs of facilities of the Enterprise.

*Working Capital Fund* — required a contribution of \$7,000 for the year ended June 30, 1993, which can be used for specific purposes at the direction of the Board of Supervisors upon the written recommendation of the Chief Administrative Officer.

*Rate Stabilization Fund* — requires that all available monies be deposited into the fund after making the other required payments and deposits. The fund shall be used to reduce and to level projected future increases in customer sewage rates.

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

**(4) Sewer Revenue and General Purpose Sewer Revenue Bond Funds, Continued**

All restricted funds are held by the Treasurer of the City except for approximately \$37,100 and \$32,600 at June 30, 1997 and 1996, respectively, which are held by a trustee. The components of the restricted funds at cost, which approximates market value, at June 30 are as follows:

	<u>1997</u>	<u>1996</u>
Expense Fund:		
U.S. Government securities	\$ 14	14
General Purpose Interest Fund:		
U.S. Government securities	8,878	9,090
General Purpose Principal Fund:		
U.S. Government securities	15,579	10,886
General Purpose Reserve Fund:		
U.S. Government securities	12,626	12,626
Repair and Replacement Fund:		
Cash and investments with City Treasurer	15,593	13,788
Working Capital Fund:		
Cash and investments with City Treasurer	4,280	7,000
Rate Stabilization Fund:		
Cash and investments with City Treasurer	<u>37,741</u>	<u>26,653</u>
	<u>\$ 94,711</u>	<u>80,057</u>

The Resolutions also established a Surplus Revenue Fund for the purpose of accumulating any remaining revenues after providing for the requirements of the above funds. These remaining revenues would be available for various purposes, as established in the Resolutions, including payment of principal and interest on General Obligation Bonds, payment of maintenance and operation costs, additions, betterments, extensions or improvements to the sewage system and purchases or redemptions of the Sewer Revenue Bonds. There was no balance in the Surplus Revenue Fund at June 30, 1997 and 1996.

**(5) Funds Held for Construction**

This account consists of the remaining net proceeds from the sale of the revenue bonds and interest earned on certain of these funds after meeting any required interest and reserve fund deposits, and the remaining proceeds from the sale of City General Obligation Bonds pertaining to sewage and water pollution control. These funds are to be used for the acquisition, construction, improvement and financing of Enterprise property, plant and equipment.

Construction funds are comprised of cash and investments with City Treasurer and amounted to approximately \$113,104 and \$169,598 at June 30, 1997 and 1996, respectively.

(Continued)

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

**(6) General Obligation Bonds**

Pursuant to City policy, the Enterprise is obligated to pay the principal and interest of General Obligation Bonds of the City that relate to sewage and water pollution control. The bonds have interest rates that range from 4% to 6% and mature annually through 1998. If the Enterprise's revenues are not sufficient to make these payments, the City must make the payments from other sources (note 11).

The future annual debt service relating to the General Obligation Bonds outstanding at June 30, 1997 are as follows:

<u>Fiscal Year</u>	
1997-98	\$ 4,707
1998-99	<u>4,753</u>
	9,460
Less: Interest	(400)
Current portion	<u>(4,400)</u>
Long-term portion at June 30, 1997	\$ <u>4,660</u>

The Enterprise has complied with the debt covenants of the General Obligation Bonds.

**(7) Sewer Revenue and Sewer Revenue Refunding Bonds**

*(a) General Purpose Sewer Revenue Bonds Series 1991*

In July 1991, the Board of Supervisors of the City adopted resolutions providing for the issuance of \$170,000 General Purpose Sewer Revenue Bonds (Series 1991). Interest rates for the issue vary from 5.75% to 6.50%. The sale of the bonds was closed on October 3, 1991.

The Series 1991 Bonds were issued without voter approval as such bonds were to be used to finance facilities under Cease and Desist Orders from the San Francisco Bay Regional Water Quality Control Board (the Regional Board). The bonds are payable solely from pledged revenues of the Enterprise and are not payable from any other source.

On March 2, 1994 Sewer Revenue Refunding Bonds Series 1994 were issued with a face value of approximately \$175,000 of which net proceeds were used to refund approximately \$144,700 of the Series 1991 Bonds in a legal defeasance. At June 30, 1997 and 1996, approximately \$18,400 and \$20,800, respectively, of the original face value remain outstanding (note 7c).

(Continued)

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

**(7) Sewer Revenue and Sewer Revenue Refunding Bonds, Continued**

*(b) Sewer Revenue Refunding Bonds Series 1992*

On August 4, 1992, the Board of Supervisors of the City adopted a resolution providing for the issuance of the Sewer Revenue Refunding Bonds Series 1992 (the 1992 Refunding Bonds) in the principal amount of approximately \$331,000 with interest rates varying from 5.5% to 6.0% maturing serially through October 1, 2015.

As defined in the resolution, the principal and interest of the 1992 Refunding Bonds are payable from the revenue of the Enterprise and from monies deposited in certain funds and accounts pledged thereto. The outstanding principal balance of the 1992 Refunding Bonds at June 30, 1997 and 1996 was approximately \$295,100 and \$304,700, respectively.

*(c) Sewer Revenue Refunding Bonds Series 1994*

On January 24, 1994, the Board of Supervisors of the City adopted a resolution providing for the issuance of the Sewer Revenue Refunding Bonds Series 1994 (the 1994 Refunding Bonds) in the principal amount of \$174,980 with interest rates varying from 4.7% to 5.375%. Interest-only payments are due semi-annually on April 1 and October 1 of each year until April 1, 2000, at which time the bonds begin to mature serially through October 1, 2022.

As defined in the resolution, the principal and interest of the Refunding Bonds are payable from the revenue of the Enterprise and from monies deposited in certain funds and accounts pledged thereto. The outstanding principal balance of the 1994 Refunding Bonds was approximately \$175,000 at June 30, 1997 and 1996.

The Enterprise has complied with the debt covenants of the Refunding Bonds.

(Continued)

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

(7) Sewer Revenue and Sewer Revenue Refunding Bonds, Continued

(d) *Sewer Revenue Bonds, Series 1995*

On November 8, 1994, voters approved the issuance of Sewer Revenue Bonds in the amount of approximately \$146,100. On May 8, 1995 the Board of Supervisors of the City adopted a resolution providing for the issuance of the Sewer Revenue Bonds Series 1995A and 1995B (the 1995 Bonds). The Series 1995A Bonds have a principal amount of approximately \$44,200 with interest varying from 5.375% to 5.95% and mature serially through October 1, 2025. Interest payments are due semiannually on April 1 and October 1 of each year. The Series 1995B Bonds have a principal amount of approximately \$11,300 with interest varying from 5.55% to 5.95% and mature serially from October 1, 2006 through October 1, 2010. Interest payments are due semi-annually beginning October 1, 2006 through October 1, 2010. The Enterprise recognizes annual interest expense on the Series 1995B Bonds over the life of the Bonds using the interest method. The Enterprise has recognized approximately \$1,400 and \$659 of unpaid interest on the Series 1995B Bonds at June 30, 1997 and 1996, respectively, and has included it with the outstanding principal balance of the 1995 Bonds. The 1995 Bonds were issued for the purpose of providing funds for certain improvements to the City's sewage treatment and disposal system.

As defined in the resolution, the principal and interest of the 1995 Bonds are payable from the revenue of the Enterprise and from monies deposited in certain funds and accounts pledged thereto. The outstanding principal balance and accrued interest of the 1995 Bonds was approximately \$56,900 and \$56,200 at June 30, 1997 and 1996, respectively.

(Continued)

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

**(7) Sewer Revenue and Sewer Revenue Refunding Bonds, Continued**

*(e) Sewer Revenue and Sewer Revenue Refunding Bonds Debt Service*

The future annual debt service of the Series 1991, the Series 1992 and Series 1994 Refunding Bonds, and the Series 1995 bonds outstanding at June 30, 1997, are as follows:

<u>Fiscal Year</u>	<u>General Purpose Sewer Revenue Bonds Series 1991</u>	<u>Sewer Revenue Refunding Bonds Series 1992</u>	<u>Sewer Revenue Refunding Bonds Series 1994</u>	<u>Sewer Revenue Bonds Series 1995</u>
1997-98	\$ 3,637	31,033	9,144	2,550
1998-99	3,635	31,061	9,144	2,550
1999-00	3,639	31,134	9,608	3,304
2000-01	3,647	31,096	10,020	3,297
2001-02	3,657	31,101	10,021	3,292
Thereafter	<u>3,669</u>	<u>291,124</u>	<u>289,616</u>	<u>101,404</u>
	21,884	446,549	337,553	116,397
Less:				
Interest	(3,525)	(151,469)	(162,572)	(59,529)
Discount	(269)	(3,897)	(2,293)	—
Refunding loss	—	—	(11,602)	—
Current portion	<u>(2,610)</u>	<u>(14,700)</u>	<u>—</u>	<u>—</u>
Long-term portion at June 30, 1997	<u>\$ 15,480</u>	<u>276,483</u>	<u>161,086</u>	<u>56,868</u>

The Enterprise has complied with the debt covenants of the Sewer Revenue and Sewer Revenue Refunding Bonds.

(Continued)

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

**(8) State Revolving Fund Loans**

The Enterprise entered into several contracts with the SWRCB under which the Enterprise can borrow up to prescribed maximum amounts to finance the construction of certain facilities. Loans outstanding at June 30, 1997 are summarized as follows:

<u>Project</u>	<u>Date of loan</u>	<u>Maturity date</u>	<u>Interest rate</u>	<u>Amount outstanding</u>	<u>Maximum loan amount</u>
Oceanside	07/25/90	2010	3.4%	\$ 30,233	40,000
Oceanside	06/10/91	2011	3.5%	24,464	32,376
Mariposa	01/10/91	2011	3.5%	5,800	7,624
Oceanside	04/28/92	2007	3.5%	30,166	42,200
Mariposa	11/01/91	2011	3.1%	1,556	1,936
Lake Merced	02/05/92	2012	3.1%	16,950	21,114
Islais Creek	10/08/92	2012	3.0%	4,786	5,706
Oceanside	12/24/93	2012	2.9%	12,557	14,100
Islais Creek	09/07/93	2012	3.1%	23,601	26,800
Islais Creek	06/17/94	2013	2.9%	14,146	15,000
Islais Creek	06/13/96	2015	3.4%	9,662	10,000
Rankin Pump	12/23/96	2016	3.1%	<u>10,000</u>	<u>15,000</u>
				<u>\$ 183,921</u>	<u>231,856</u>

Repayment of interest and principal shall be by installments with the final amount due from 15 to 20 years after the first disbursement by SWRCB. Disbursements are made by SWRCB as funds are spent for the projects. The Enterprise is required to comply with applicable federal and state regulations.

(Continued)

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

**(8) State Revolving Fund Loans, Continued**

The future annual requirements to amortize the loans outstanding at June 30, 1997 are as follows:

<u>Fiscal Year</u>	<u>Principal</u>	<u>Interest</u>
1997-98	\$ 10,186	6,062
1998-99	10,578	5,670
1999-00	10,927	5,320
2000-01	11,289	4,959
2001-02	11,662	4,586
Thereafter	<u>129,279</u>	<u>24,709</u>
	183,921	\$ <u>51,306</u>
Less current portion	<u>(10,186)</u>	
Long-term portion at June 30, 1997	\$ <u>173,735</u>	

**(9) Deferred Revenue**

Deferred revenue consists of an upfront fee received by the Enterprise during the 1994-95 fiscal year.

In January 1995 the Enterprise entered into a forward purchase and sale agreement with an investment bank (the Bank). Under the agreement, the Enterprise received an upfront fee of approximately \$8,900 from the Bank. In exchange, the Enterprise will use its debt service payments not yet due to bondholders to purchase short-term U.S. Treasury bills from the Bank at face value.

The upfront fee was deposited into the Enterprise's Rate Stabilization Fund and recorded as deferred revenue in the accompanying financial statements. Revenue will be recognized over the life of the agreement based on the present value of the future earnings. The balance at June 30, 1997 and 1996 is approximately \$6,400 and \$7,600, respectively.

(Continued)

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

(10) Employee Benefits

(a) *Retirement Plan*

Plan Description — The City has a single-employer defined benefit retirement plan (the Plan) which is administered by the San Francisco City and County Employees' Retirement System (the Retirement System). The plan covers substantially all full-time employees of the Enterprise along with other employees of the City. The Plan provides basic service, retirement, disability and death benefits based on specified percentages of final average salary and provides cost-of-living adjustments after retirement. The Plan also provides pension continuation benefits to qualified survivors. The San Francisco City and County Charter and Administrative Code is the authority which establishes and amends the benefit provisions and employer obligations of the Plan. The Retirement System issues a publicly available financial report that includes financial statements and required supplementary information for the Plan. That report may be obtained by writing to the San Francisco City and County Employees' Retirement System, 1155 Market Street, 2nd Floor, San Francisco, CA 94103 or by calling (415) 554-1520.

Funding Policy — Contributions are made to the basic payroll plan by both the Enterprise and employees. Employee contributions are mandatory. Employee contribution rates for 1997 varied from 7.5% to 8% as a percentage of covered payroll. The Enterprise is required to contribute at an actuarially determined rate. Enterprise contribution rates for 1997 as a percentage of covered payroll were approximately .93%. The Enterprise contributions to the San Francisco City and County Employees' Retirement System for the years ending June 30, 1997, 1996 and 1995 were approximately \$1,600, \$1,900 and \$1,200, respectively, equal to the required contributions for the year.

(b) *Health Care Benefits*

Health care benefits of Enterprise employees, retired employees and surviving spouses are financed by beneficiaries and by the City through the City and County of San Francisco Health Service System, a nonexpendable trust fund. The Enterprise's contribution covering current and retired employees, which amounted to approximately \$1,200 in fiscal years 1997 and 1996, respectively, is determined by Charter provisions based on similar contributions made by the ten most populous counties in California. The Enterprise's liability for both current employee and postretirement health care benefits is limited to its annual contribution.

(Continued)

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

**(10) Employee Benefits, Continued**

*(c) Deferred Compensation Plan*

The City offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. The plan, available to all City employees, permits them to defer a portion of their salary until future years. The deferred compensation is not available to employees until termination, retirement, death or unforeseeable emergency.

All amounts of compensation deferred under this plan, including all property and rights purchased with those amounts and income earned which has not been paid or made available to the employee or other beneficiary are considered solely the property and rights of the City, subject only to the claims of the City's general creditors. Participants' rights under the deferred compensation plan are equal to those of general creditors of the City in an amount equal to the fair market value of the deferred account for each participant. Amounts are included in an agency fund in the Comprehensive Annual Financial Report of the City.

**(11) Related Party Transactions**

The City performs certain administrative services such as maintenance of accounting records and investment of cash for all fund groups within the City. The various funds are charged for these services based on the City's indirect cost allocation plan. The overhead allocation paid to the General Fund of the City was approximately \$1,800 for the years ended June 30, 1997 and 1996, respectively.

The City transferred approximately \$4,700 from its Debt Service Fund to the Enterprise during the years ended June 30, 1997 and 1996, respectively, to provide for general obligation bond debt service of the Enterprise.

The following is a summary of other major transactions involving services by or to other City Departments:

- The San Francisco Water Department bills and collects sewer service charges on behalf of the Enterprise and charges amounts designed to recover that department's costs.
- The Enterprise buys electricity from the City's Hetch Hetchy project at market rates. This amount, totaling approximately \$6,434 and \$6,100 for the years ended June 30, 1997 and 1996, respectively, has been included in materials, utilities and supplies in the accompanying statements of operations.

(Continued)

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

**(11) Related Party Transactions, Continued**

- The Enterprise provides sewer services to other City departments at the nonresidential rates established by the Enterprise.
- The City's Department of Public Works provides certain engineering and other services to the Enterprise and charges amounts designed to recover that department's costs.

**(12) Commitments and Contingencies**

*(a) Federal and State Capital Grants*

The Enterprise's construction program was primarily funded by a combination of grants and loans from the EPA and the SWRCB. Under EPA regulations that applied to the Enterprise grants, the EPA funded 55% of eligible costs of construction projects. The SWRCB funded 12.5% of such grant eligible costs, and the remainder of all construction and project costs were funded by the Enterprise. The SWRCB generally approved the eligibility of costs under both its own grants and those of the EPA. As of June 30, 1997, approximately \$5,300 of costs billed by the Enterprise have been reviewed but not approved by the SWRCB. The Enterprise has established a reserve for the full amount of the outstanding billings pending approval by the SWRCB as of June 30, 1997 and 1996. Reimbursement of costs initially approved by the SWRCB are also subject to final audit by the SWRCB and the EPA. However, management does not expect the ultimate disallowances, if any, as a result of these audits to materially exceed the amounts reserved for.

*(b) Construction Contractors' Claims*

Certain construction contractors engaged pursuant to the Enterprise's construction programs have submitted claims for additional compensation based on contingencies and conditions that they consider not to have been reasonably anticipated at the time the contracts were awarded. Additional claims are expected to be submitted. In the opinion of Enterprise management, these claims will not have a material impact on the Enterprise's financial statements.

*(c) Construction Commitments*

As of June 30, 1997, commitments under outstanding construction programs aggregated approximately \$19,400. A portion of this amount is financed by low interest loans entered into with the SWRCB (note 8).

(Continued)

CITY AND COUNTY OF SAN FRANCISCO  
CLEAN WATER PROGRAM FUND GROUP

Notes to Financial Statements  
(Dollars in thousands)

**(12) Commitments and Contingencies, Continued**

*(d) Estimated Claims Payable*

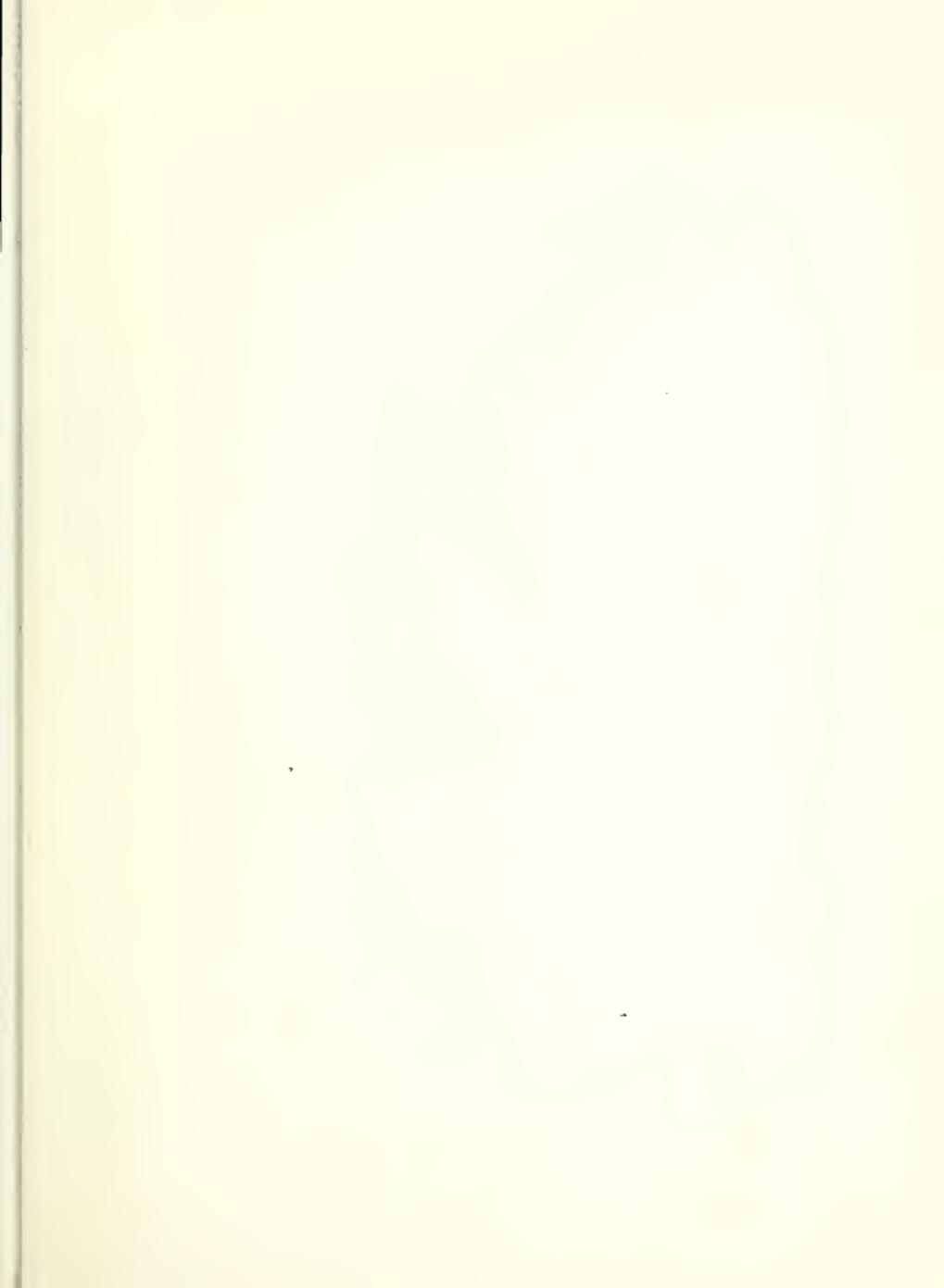
Numerous lawsuits are pending or threatened against the Enterprise. The amount of the liability estimated by the City attorney to be probable of occurrence as of June 30, 1997 and 1996, in accordance with Statement of Financial Accounting Standards No. 5, is \$7,600 and \$8,000, respectively. The recorded liability is the Enterprise's best estimate based on available information and may be revised as further information is obtained and as pending cases are litigated.

The City attorney estimates that certain other pending cases have a reasonable possibility (defined as more than remote but less than likely) of resulting in additional liability in the aggregate amount of approximately \$300. This amount is not recorded in the accompanying financial statements because the status and/or facts of these cases are such that it is not probable that a loss has been incurred as of June 30, 1997.

*(e) Workers' Compensation*

The City self-insures for Workers' Compensation coverage. The Enterprise estimates claim liabilities based on current industry practice, including an estimate for incurred but not reported claims. The total amount estimated to be payable for claims incurred as of June 30, 1997 and 1996, was approximately \$543 and \$479, respectively, which is included in accounts payable and accrued expenses in the accompanying financial statements.







Cover Photo: Pulgas Water Temple in San Mateo County. Marks the location where Hetch Hetchy water meets local supplies.

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